DOCUMENT RESUME

ED 201 140 EC 132 566

AUTHOR	McGuigan, Corrine A.: And Others
TITLE	The Nevada Teachers' Resource Kit.
INSTITUTION	Nevada State Dept. of Education, Carson City. Div. of Special Education.
SPONS AGENCY	Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
PUB DATE	79
GRANT	G007605796
NOTE	551p.
EDRS PRICE	MF02/PC23 Plus Postage.
DESCRIPTORS	Behavior Change: *Classroom Techniques: *Disabilities; Elementary Secondary Education: Handicap Identification: *Instructional Materials: Parent School Relationship: Resource Materials: *Student Educational Objectives: *Student Evaluation: *Teaching Methods

ABSTRACT

The Nevada Teachers' Resource Kit (NTRK) is a collection of information useful for regular and special educators organized into nine modules. Most modules include a statement of purpose, an explanation of the internal organization of the module, exercise and practice pages, summary and review pages, and a listing of additional readings. Modules have the following titles (with sample subtopics in parentheses): "An Introduction to the NTRK" (Public Law 94-142): "Assessment--Procedures and Materials" (screening and referrals and selection): "Classroom Materials" (material selection, material modification, and material evaluation): "Classroom Organization and Management" (planning and organizing): "Student Goals/How to Set and Achieve Them" (goals and sequences): "Basic Instructional Strategies" (key issues related to instruction): "Behavior Management" (planning, implementing, and monitoring): "Classroom Monitoring Strategies" (basic monitoring strategies and intervention): and "Working Relationships" (parents and basic communication skills). (DB)

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THE NEVADA TEACHERS' RESOURCE KIT

EC132566

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ACKNOWLEDGMENTS

A number of people and agencies assisted in the development of this publication. Funds for the project which financed the development and production were provided through a grant from the U.S. Office of Education, Bureau of Education for the Handicapped, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred. This grant (No. G007605796) is authorized under the provisions of P.L. 91-230, Title VI, Part G, and is managed by the Nevada Department of Education, Division of Special Education.

The *Nevada Teachers' Resource Kit* was designed, written and produced by Corrine A. McGuigan, University of Idaho, with the assistance of Sue Shoemaker (Modules Four and Five), Jennifer Oleson (Module Nine), and Anne Matthewson (Module Three).

The project was cooperatively developed by the Nevada Department of Education and the National Learning Disabilities Assistance Project (NaLDAP), Andover, Mass.

The *Nevada Teachers' Resource Kit* is a product of the Nevada Department of Education, Division of Special Education.

AL RAMIREZ
Project Director

AN INTRODUCTION TO THE *NTRK*

What it is and How to use it

The *Nevada Teachers' Resource Kit* is a product of the Nevada Department of Education, Exceptional Pupil Education.

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PURPOSE

The *Nevada Teachers' Resource Kit* is a collection of information regarding critical dimensions of classroom instruction and management. It has been developed to act as a source of information for regular and special educators who wish to meet the individual needs of students.

The *NTRK* is not intended to tell you what you should or should not do as a professional. Its purpose lies in providing you a source of information and suggestions when that is your need. It is designed to help you target instruction materials or strategies which may work efficiently with any one learner.

It is the hope of the staff of the Nevada Department of Education that you will find the *Nevada Teachers' Resource Kit* useful; that it will enhance your instructional delivery, maximizing your own classroom time as well as that of your students.

ORGANIZATION

GENERAL ORGANIZATION

To assist you in locating information efficiently, the *Nevada Teachers' Resource Kit* follows specific organizational guidelines. Familiarity with this organizational format will help you understand why specific information is included and where it can be found.

NTRK ORGANIZERS

1. *The Table of Contents.*

The Table of Contents within each module provides a quick and accurate account of module content and an indication of the amount of information contained on a particular issue. Overall Kit contents—which is reflected in a listing of module titles—can be found on page 11, Module One.

2. *Statement of Purpose.*

This brief rationale statement relates the importance of a particular module's content and why it is included in the *NTRK*. When necessary, explanations are also given for why specific information was excluded with a note on where the information might be found (i.e., "see additional readings").

3. *Internal Module Organization.*

The internal organization of different modules varies. This occurs because the type of information from one unit to another varies and no one outline could be found to be totally appropriate for the presentation of all information. For this reason, a brief explanation of the specific internal organization and format is provided. It describes how information is presented and the major focuses of the material. An understanding of both organization and focus should help you maximize your reading time.

4. *Exercise and Practice Pages.*

Not all but most modules include exercise or practice pages. Depending on your own needs, these entries may or may not be important. Certainly their level of usefulness is directly related to the level of application you wish to achieve. And for those of you who aren't always sure your answer is correct, answer sheets follow each exercise.

5. *Summary and Review Pages.*

Included periodically throughout the units are pages which summarize or review previously discussed information. Summary or review statements may prove to be particularly helpful if you wish to select portions of a module to skip. They may also be helpful in determining which sections you should read.

6. *Additional Readings.*

A list of additional readings is included at the end of modules two through nine. These listings (which in no way reflect a *complete* review of the literature) are intended to give you a starting point for acquiring more detailed or expanded information on relevant subjects.

MODULE ONE
ORGANIZATION

Module One, an introduction to the *NTRK*, consists of two major parts—a division made to facilitate the usability of the module.

Part One: This section explains the general organization of the modules and provides a discussion on how to locate information. It also provides the definition for codes used periodically throughout the kit. Its purpose lies in providing you an orientation to the *NTRK*.

Part Two: Part two is intended to enhance your familiarity with issues of local and national concern. It includes notes on the following issues:

- Public Law 95-142.
- Child study teams.
- Least restrictive environments.

The section ends with a listing of state and local personnel which you should find helpful next time you need to call for information or help.

PART ONE

NTRK MODULE TITLES

The *Nevada Teachers' Resource Kit* is organized into ten components or modules. Each, designed to function independently or as a link with other units, deals with one aspect of the teaching/learning process.

Module One:	An introduction to the *NTRK:* What it is and how to use it.
Module Two:	Assessment: Tools and guidelines.
Module Three:	Classroom materials: Evaluation, selection and modification.
Module Four:	Classroom organization and management.
Module Five:	Student goals: How to set and achieve them.
Module Six:	Basic instructional strategies.
Module Seven:	Management of appropriate and inappropriate classroom behaviors.
Module Eight:	Monitoring strategies.
Module Nine:	Working relationships: How to make things happen with parents and teachers.
Module Ten:	Index of problems.

LOCATING INFORMATION

There are two options for locating precise information within the *NTRK*. These are:

1. Location of information through module number and utilization of the Table of Contents; and
2. Location of information through the use of the *INDEX OF PROBLEMS*, Module Ten.

Again, if you choose to try the Table of Contents route, you will want to select the module or modules which most closely relate to your topic/interest. Remember,

MODULE TITLES AND NUMBERS ARE LISTED
ON PAGE 11, MODULE ONE.

In using the Index to locate information, you will need to restate your interest as a "problem" or concern. For example, if you are seeking information on assessment instruments for Severely/Profoundly Handicapped students, you might phrase your problem as one of the following:

"What assessment tools are available for assessing the skills of S/PH children?"; or

"How might I evaluate my assessment instrument?"

If you follow the brief guidelines at the beginning of Module Ten, you should be able to quickly locate the proper Index entries and subsequently the pages in the *NTRK* which answer your question.

CODES

Many times teaching strategies, classroom materials or organizational systems vary little from one handicapping condition to another. However, when they do, as in the case of serving moderately handicapped elementary students rather than secondary vocational students, it is important to know WHEN and HOW instruction or management change.

Because the *Nevada Teachers' Resource Kit* has been developed to meet the needs of regular and special classroom teachers who serve a variety of handicapped learners, the material contained in the *NTRK* has been coded to draw attention to specific populations when it is important to do so. The codes which correspond to specific grade levels and types of handicapping conditions are listed below:

ELEM	Elementary school including kindergarten.
SEC/VOC	Secondary and/or Secondary Vocational.
EC	Early Childhood (birth through pre-school).
G	Gifted/talented.
SL	Slow Learners (handicapped and non-handicapped).
MLD/MOD	Mildly and Moderately handicapped learners including students who are: • learning disabled; • mildly/moderately physically handicapped; • mildly/moderately mentally retarded; and/or • mildly/moderately emotionally disturbed.

SPH	Severely/Profoundly handicapped including all learners with severe mental and/or physically handicapping conditions.
V	Visually impaired/partially sighted and blind.
H	Hearing impaired or deaf.
C	Communication/language disorder.

A NOTE FROM THE AUTHORS

Like many professions, education is a dynamic field. Constantly, new methods, materials and strategies are developing which contribute to our ability to serve children effectively.

As educators, it is our responsibility to "stay on top" of developments around us. As educational writers, it is our desire to help you "stay on top."

The *Nevada Teachers' Resource Kit* is a partial synthesis of our present knowledge; it is our attempt to forward our best and most recent information. At the same time, we recognize it is incomplete—incomplete due to omission and incomplete due to oversight.

Indeed, at the very onset of the project, we recognized that the breadth and scope of information conveyed had to be curtailed. Other information, because it is not yet recorded in the literature or because we did not cross it in our review, is unintentionally omitted.

For information needed by you which is either intentionally or unintentionally omitted, we apologize.

And as we apologize, we would like to offer you this opportunity to convey "that information" to us for possible future editions of the *NTRK*.

Other comments you have about the construction or content of the product will also be most graciously received.

A page for your feedback follows.

Product Feedback Sheet

Comments you have regarding the following aspects of product development will be greatly appreciated and graciously received. Thank you for your time.

Content

Product Organization

Product Visibility

Other Comments and Recommendations

If you would like to be informed of future product revisions, please print your name and address below:

Name ....

Street ....

City/State .... Zip ....

Return to: *NTRK* FORUM
Mr. Al Ramirez
Nevada Department of Education
Capitol Complex
Carson City, Nevada 89710

PART TWO

PUBLIC LAW 94-142

While all children do learn, not all children learn in the same way. Many children learn new skills or obtain new information adequately through group instruction while others need individual help. For this reason, it is important to find placements and programs which will allow every student to grow. The processes of indentifying appropriate educational placements and of developing proper educational programs comprise the heart of Public Law 94-142, the Education for All Handicapped Children's Act.

Formally made law by Congress on November 18, 1975, Public Law 94-142 provides, to date, the largest sum of money ever made available for educational services to exceptional students. Through a flow-through-state system, funds are made available to districts in an attempt to provide for each exceptional student the quality program she or he deserves.

While the law is complex in certain aspects, its core elements are clear. These elements, the establishment and functioning of *Child Study Teams* and the placement of students in *the least restrictive educational environment or setting* are central. For this reason, a brief discussion of each follows.

CHILD STUDY TEAMS

The concept of the Child Study Team was developed to ensure that every child who needed special services could and would be identified, and that once identified, would receive the most appropriate placement and instruction possible.

Obviously, applying the theory of "two heads are better than one," P.L. 94-142 mandated that every learner considered for special placement receive the attention of a number of professionals. This team, always to include

- a district representative,
- the referring professional, parent or student, and
- professional adequately trained to assess the strengths and weaknesses of the student,

was, and indeed is, charged to determine if educational services other than those provided in the regular classroom are necessary. If special services are deemed necessary, it is then the team's responsibility to determine *what placement* option is most appropriate and the *content* of the ensuing educational program.

Certainly the concept of the Child Study Team is sound. Certainly it enhances the quality of evaluations as well as the subsequent placement and program development. But inherent in the application of the theory are the many common problems which result from trying to get a number of people to meet, to agree on goals and to plan.

On the following pages are three worksheets which may help guide your interactions with professionals, parents, paraprofessionals and students who serve with you on Child Study Teams.

A GUIDE TO INITIAL CHILD STUDY TEAM ACTIVITIES

GATHERING ASSESSMENT INFORMATION

1. Establish a procedure for *identifying* exceptional students (referral, screening process, etc.).
2. Determine appropriate testing batteries for students referred with particular types of concerns (e.g., visual impairment, learning disability, etc.).
3. Obtain parent permission from parents/guardians of students to be tested.
4. Select personnel to administer tests, screeners, etc. (members of the *CST*).
5. Set date(s) for testing.
6. Coordinate testing time and place with cooperating personnel (classroom teachers, parents, physical therapist, etc.).
7. Administer assessments.
8. Record assessment results; if appropriate, duplicate copies.

REPORTING ASSESSMENT INFORMATION

9. Schedule a date, time and place for the Child Study Team meeting.
10. Appoint a person to chair the meeting and another to record the happenings.
11. Meet (see guidelines for meeting and reporting information).
12. If necessary, reschedule additional meetings; make provisions for getting each member of the team the notes of the gathering.

GUIDELINES FOR CONDUCTING CHILD STUDY TEAM MEETINGS

1. Schedule a convenient DATE for the majority of Child Study Team members.

2. Schedule a PLACE for the meeting. Be sure to consider barriers in the environment which may impair the mobility of any member.

3. Schedule a TIME for the meeting.

4. Notify each member of the team of the time, place, date and TOPIC of the meeting. If you can predict an expected ENDING TIME to the meeting, this is equally helpful.

5. If your meeting is at the end of a busy day, arrange to have coffee, soda or other treats for the members.

6. Type and duplicate an agenda.

7. Establish, either formally or informally, GUIDELINES for the meeting—e.g., who will speak and in what order, how will questions be handled (one at a time as they come up or at a specific time in the meeting), etc.

8. Arrive at the meeting place early; arrange furniture to facilitate open communication, adjust lighting, especially if a member of the team is either visually or hearing impaired.

9. Start the meeting by: (a) introducing team members and their roles, (b) reviewing the agenda, and (c) reporting the guidelines for reporting information.

10. Guide the discussion. Seek information both for clarity and confirmation. Periodically summarize the proceedings.

GUIDE TO REPORTING ASSESSMENT INFORMATION

	Yes	No
1. Report is written or conveyed in understandable language.	☐	☐
2. Instruments or processes used in evaluation are identified.	☐	☐
3. Setting in which evaluation occurred is described.	☐	☐
4. Evaluation contains concise statement of specific results.	☐	☐
5. Problem areas identified by the evaluation are clearly described.	☐	☐
6. The report is void of statements not substantiated by objective data.	☐	☐
7. Comments/problems stated as a result of observations are stated in meaningful terms (behaviorally, if possible).	☐	☐
8. Observational data is accompanied by precise descriptions of (a) where, (b) what time and (c) how many.	☐	☐
9. Evaluation reports strengths as well as weaknesses.	☐	☐
10. Information describes conditions which might have influenced child's ability to perform the assessment task(s) if appropriate.	☐	☐

LEAST RESTRICTIVE ENVIRONMENT

Fighting for the status of the "most controversial point" of the Education for All Handicapped Children's Act is that of what really constitutes the "Least Restrictive Environment." While volumes have been (and no doubt, will continue to be) written on the matter, the following statement seems a fair synthesis for most educators:

> The *Least restrictive environments* is that placement option which allows a student maximum participation in the academic and social activities of his or her chronological peers while ensuring personal academic and social growth.

Placement options most generally considered in school districts include:

- Regular school/regular classroom;
- Regular school/regular classroom/with supportive services;
- Regular school/resource room/part time;
- Regular school/self-contained special education classroom;
- Special Education School;
- Homebound programs; and
- Institutional placement.

A frequent misconception in discussions surrounding LRE's is that of organizing the placement option on a diagram, usually entitled, "Least to Most Restrictive Placement Alternatives." This, perhaps, is inaccurate because the "restrictiveness" or "nonrestrictiveness" of an option is defined, much like reinforcement, by the current and specific needs of the learner.

Generally, in determining the proper placement option for a student, you should be cognizant of two important things:

1. What is best for the student ACADEMICALLY, and
2. What is best for the student SOCIALLY.

The best, least restrictive placement for a student will be a perfect blending of these two considerations.

Below, and on the following page, is one edition of a *Placement Alternatives Guide*. Developed by McGuigan (1978) it offers a starting point for those truly confused on what might be the best of possible recommended placements.

PLACEMENT ALTERNATIVES GUIDE

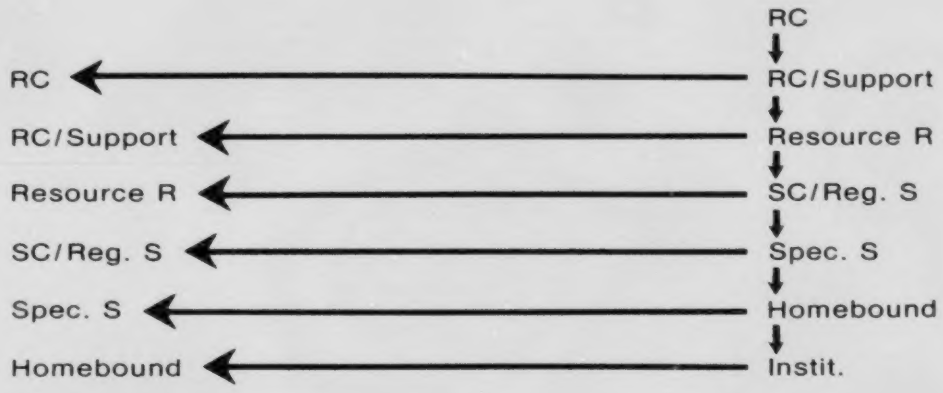
On the following page is a diagram of placement options (key below). Using the table provided (page 24) mark answers to each of the questions after you have first identified the student's *current* placement.

Step One:	In the right hand column of the placement grid, identify the current placement of the student.
Step Two:	Locate the Q/Answ. Grid. In the *Round One* column, answer each of the questions presented.
Step Three:	Count the number of "YESES" you entered.
Step Four:	Locate the placement guide key. From it determine the placement which might be appropriate by reading from the placement grid either left to right or right to left.
Step Five:	Using the placement option suggested (step four) *reanswer* the questions in the *Round Two* column. Continue the process until your "Yes Score" indicates "maintain placement."

KEY

RC:	Regular school/regular classroom.
RC/Support:	Regular school/regular classroom with support.
Resource R:	Regular school/part time resource room
SC/Reg. S	Regular school/self-contained special education classroom.
Spec. S:	Special Education School.
Homebound:	Homebound Program.
Instit.:	Institutional placement.

PLACEMENT GRID


RC
RC
RC/Support
RC/Support
Resource R
Resource R
SC/Reg. S
SC/Reg. S
Spec. S
Spec. S
Homebound
Homebound
Instit.

PLACEMENT ALTERNATIVES GUIDE

QUESTION AND ANSWER GRID

Before you answer each question, be sure to locate the CURRENT placement of your student using the right hand column of the *Placement Grid*.

In the current placement,	Round One		Round Two	
	Yes	No	Yes	No
1. Is the student experiencing adequate academic growth?	☐	☐	☐	☐
2. Is the student experiencing adequate social growth?	☐	☐	☐	☐
3. If the student were placed in the next placement option *directly below current placement*, is academic growth likely to be restricted?	☐	☐	☐	☐
4. If the student were placed in the next placement option *directly below current placement*, is social growth likely to be seriously impaired?	☐	☐	☐	☐
5. If the student were placed in the next placement option *directly above current placement* would academic growth be enhanced?	☐	☐	☐	☐
6. If the student were placed in the next placement option *directly above current placement* would social growth be enhanced?	☐	☐	☐	☐

Answer and scoring grid, next page.

PLACEMENT GUIDE KEY

Score round one and round two separately.

Number of Yeses	*To determine placement:*
6	Read from the right hand column to the left hand column.
5-6	Read from right hand column to left hand column; consider for possible placement. Recheck by completing Round Two and rescoring.
4-5	Maintain current placement. Recheck by completing Round Two with starting point either directly above or directly below.
1-3	Read, from right hand column to placement option directly below.

DIRECTORIES

Included on the following pages are listings, or directories, of persons (or agencies) who may be able to assist you in such endeavors as:

- obtaining "updated information" on state and federal legislation pertaining to the education of exceptional children;
- obtaining information on current/available placement options within your district and within your region;
- locating programming suggestions for such skills as independent living, junior high school curriculum requirements, etc.; and/or
- identifying persons or agencies who will provide respite care for moderately and severely handicapped children.

Hopefully access to such professional listings will enhance your work with exceptional children, with their parents and with other persons concerned with appropriate educational opportunities.

NEVADA DEPARTMENT OF EDUCATION—EXCEPTIONAL PUPIL EDUCATION

885-5700

CARSON CITY

Carson City School District	885-6310
Community Health Services	885-4800
Children's Health Services	885-4885
Community Health-Public Nursing	882-5232
Carson Mental Health Clinic	885-4195
Rural Clinics-Administration Office	885-5084
Bureau of Vocational Rehabilitation	885-4470
Welfare Division, Administrator	885-4771
Eagle Valley Children's Home	882-1188
Ormsby ARC	882-8520

CHURCHILL COUNTY

Churchill County School District	423-5184
Rural Clinics, Fallon MHC	423-6528
Bureau of Vocational Rehabilitation	423-6528
Welfare District Office	423-3161
Churchill County ARC	423-3562

CLARK COUNTY

Clark County School District	736-5310
Speech and Hearing Clinic	385-0223
Special Children's Clinic	385-0223
Crippled Children's Services	385-0223
Community Health Services	385-1291
Desert Developmental Center	870-0220
Children's Behavioral Services	870-9141
Bureau of Vocational Rehabilitation	385-0111
Welfare Division	648-8550
Opportunity Village ARC	384-8170
Southern Nevada March of Dimes	384-7352
Southern Nevada Association for Handicapped	384-3062

CLARK COUNTY—*Continued*

Southern Nevada Epilepsy Society	384-2393
Economic Opportunity Board of Clark County	647-2010
Bureau of Vocational Rehabilitation (Henderson)	564-2541
Welfare District Office (Henderson)	564-5452

DOUGLAS COUNTY

Douglas County School District	782-5134
Community Health-Public Nursing	782-5176

ELKO COUNTY

Elko County School District	738-5196
Rural Clinics	738-8021
Rehabilitation Division	738-7211
Welfare Division	738-7211
Elko County ARC	738-3457
Community Health-Public Nursing (Wells)	752-3216

ESMERALDA COUNTY

Esmeralda County School District	485-6382

EUREKA COUNTY

Eureka County School District	237-5330

HUMBOLDT COUNTY

Humboldt County School District	623-2027
Community Health-Public Nursing	623-2020
Rural Clinics, Winnemucca MHC	623-5293
Bureau of Vocational Rehabilitation	623-5273
Welfare District Office	623-3670

LANDER COUNTY

Lander County School District	635-2886
Community Health-Public Nursing	635-2386

LINCOLN COUNTY

Lincoln County School District	728-4471
Community Health-Public Nursing	728-4265
Welfare District Office (Pioche)	962-5315
Community Training Center Corp.	728-4541

LYON COUNTY

Lyon County School District	463-2205
Community Health-Public Nursing	463-2377
Rural Clinics, Yerington MHC	463-3191
Welfare District Office	463-2171

MINERAL COUNTY

Mineral County School District	945-2403
Community Health-Public Nursing	945-2380
Rural Clinics, Hawthorne MHC	945-3387
Welfare District Office	945-3602
Mineral County Sheltered Workshop	945-3118

NYE COUNTY

Nye County School District	482-6258

PERSHING COUNTY

Pershing County School District	273-2819
Community Health-Public Nursing	273-2041
Welfare District Office	273-2153

STOREY COUNTY

Storey County School District	847-0600

WASHOE COUNTY

Washoe County School District	322-7041
Community Health-Public Nursing	784-6360
Special Children's Clinic	784-6321
Crippled Children's Services	784-6321
Reno Speech and Hearing Clinic	784-6321
Sierra Developmental Center	784-4791
Reno Mental Health Center	784-6276
Nevada Mental Health Institute	322-6961
Children's Behavioral Services	784-4711
Bureau of Vocational Rehabilitation	784-6491
Welfare District Office	784-6201
Washoe ARC	329-6693
Alpha Productions Technologies (APT)	359-4498
Freeport Assemblies and Training Services (F.A.S.T.)	322-8597
Easter Seal Society of Nevada	359-2880
Nevada ARC	322-7255
Northern Nevada Epilepsy League	885-4440
Community Services Agency of Washoe County	329-6182

WHITE PINE COUNTY

White Pine County School District	289-4851
Community Health-Public Nursing	289-2107
Rural Clinics, Ely MHC	289-2858
Bureau of Vocational Rehabilitation	289-3184
Welfare District Office	289-3091
White Pine Rehabilitation Center (Community Training Center)	289-8126

Nevada

2

ASSESSMENT: PROCEDURES AND MATERIALS

Module Two of the *Nevada Teachers' Resource Kit* is a product of
the Nevada Department of Education, Exceptional
Pupil Education, 1978.

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PURPOSE

Those concerned with the education of exceptional children are acutely aware of legal and ethical obligations which they carry to ensure that every exceptional child receives an appropriate education. The first step in providing appropriate educational service is to identify those children who are entitled to special services or support.

Over the years, the identification of exceptional children has taken many forms, from subjective teacher referrals to highly sophisticated, complex and time-consuming assessment batteries administered by educators, psychologists, speech and language specialists, physicians and professionals from related disciplines. Obviously a manageable system of identification at the local school level lies somewhere between these two extremes.

The primary purpose of this module is to provide you with information concerning the selection and use of appropriate, meaningful and manageable assessment procedures. While no single process, procedure or assessment tool can be said definitively to be "the best" for all learners, this module does attempt to identify factors critical to the selection and administration of assessments which are optimal in appropriately identifying children in need of special services.

Initial assessment is the process of determining the specific skills of a student or a group of students. For the most part, educators collect initial assessment information for four reasons:

1. To identify learners in need of special services;
2. To identify specific program needs of individual students;
3. To identify appropriate annual goals and subsequent instructional programs for students; and
4. To provide a basis for assessment at the end of the year which reflects student progress toward targeted goals and gives a record of teacher accountability.

The content of Module Two was taken, in part, from a previous manuscript by the author: "Initial Assessment" by C. A. McGuigan, SCAT Project, State of Idaho, 1977.

Handicapping conditions exist when there is a continuous and significant discrepancy between the performance of one student and the performance of that student's peers. The main purpose of Initial Assessment, then, is to identify handicapped students (or potentially-handicapped students) so that these students can receive supportive services *which will decrease the performance gap* between their skills and those of their peers. As performance gaps are decreased, handicapped learners can return to the mainstream and participate successfully in regular class activities with little or no support. The end result of the proper identification of students who are mildly or moderately handicapped should always be the successful return of each learner to the least restrictive environment—and if possible, to a regular classroom environment on a full-time basis.

A second purpose of assessment is to identify specific skill deficits and skill strengths for each student. For this reason, when you select an assessment instrument, select one which will provide information on skills students need to perform in order to be successful in the next "least restrictive environment." Assessments which do not result in usable information for future information may be a waste of valuable teaching time and energy.

Using information from skill-based assessment tools, teachers can not only identify skill needs, but can make projections about end-of-the-year targets or annual goals. Once annual goals are identified, teachers can better plan instructional programs which are sensitive to the needs of individual students.

Assessment tools which adequately describe student skills can also be used by both regular and special educators as a source of summative data—a fourth function of assessment. By re-administering a skill-based assessment tool mid-year and again at the end of the year, educators at each grade level can measure the effectiveness of their teaching to date.

All this is to say that assessment is not a one-step, one-shot process. To appropriately identify handicapped learners and their specific problems, a series of steps which range from general teacher referrals to more sensitive repeated measures of performance on specific skills.

In Module Two of the *NTRK* guidelines for selecting assessment and referral procedures and for selecting assessment tools are discussed. Hopefully you will find the guidelines and discussion valuable in establishing, revising or polishing your current assessment practices.

ORGANIZATION

Assessment is primarily a three faceted activity. It consists of: (1) utilizing a screening and/or referral system; (2) carefully and reliably identifying specific strengths and weaknesses of students who are thought need special help (ultimately, this activity should result in determining *if* special service is needed and if so, *to what extent);* and (3) translating areas of need into instructional goals which are attended to during instruction.

In keeping with the natural divisions of assessment then, this module is divided into the following sections:

Part One:	The screening and referral process;
Part Two:	Test selection and administration; and
Part Three:	Utilization of assessment data for instruction.

In each section, attention is given to the similarities and differences as they relate to the assessment of mildly, moderately and severely/profoundly handicapped persons.

N.B.: Assessment activities, as they relate to *P.L. 94-142* and *Child Study Team* activities, are discussed in Module One.

PART ONE/S & R

Before exceptional children can be served they must first be identified. Screening and referral are two methods most commonly used by educators, parents and support staff to initially identify exceptional learners.

Referral is the process of:

1. Identifying a concern;
2. Identifying who CARES about the concern; and
3. Presenting the concern to that person or group of persons.

Referral means:

1. I think this student has a problem;
2. I think __________ is the problem; and
3. If it is a problem, something needs to be done about it;
4. Please help me decide if there is a problem; and
5. Please help me find a solution.

Referrals may be requested or initiated independently of a request. They may be made formally through a system established in a school or in a district or may be made informally in the absence of an established referral system.

More than not, referrals start with someone's hunches and result in the accumulation of data. Screening, on the other hand, starts with the collection of data.

Screening is the process of:

1. Identifying a skill or group of skills;
2. Presenting that skill or those skills to a population of students in the form of a quick test, information probe, skill sampling, etc.;
3. Scoring the student responses on each skill; and
4. Prioritizing the scores so that you can identify students who have mastered specific skills and those who have not.

Screening means:

1. I don't know who knows what in my class on these (________, ________ and ________) skills;
2. Therefore, I'm giving ALL the children a quiz covering these skills; and

3. Will score each student's response to determine if they have the skill and how well;

4. I'll prioritize the scores thereby separating those students who have mastered the skills and those who have not.

Both screening and referral are effective systems for identifying students who may have problems. Unlike referrals, however, screening avoids accidentally overlooking students, while at the same time it provides you useful information about the performance of all students in your class.

Both the referral process and the screening process can be used to identify, to some extent, those children who are of special concern or who demonstrate specific skill deficits. But whether a child should be identified as "exceptional" should be based on the actual performance discrepancy between his or her performance and the performance of peers.

Whether a child is identified as "potentially handicapped" or "exceptional" through referral or screening, each process should include these conditions:

1. Referrals should be encouraged to be made on the basis of objective information and the screening process should ALWAYS result in objective information.

2. The identified concern should be a concern specific to the needs of the learner, or his or her parents. It should reflect content expected by ALL children in the class and in the school. Screening should always cover skills of concern in "this grade," and "in this school."

GROUP SCREENING

Whenever possible, school district personnel or individual faculty members should ensure that identification procedures begin with screening of all students in regular as well as special classrooms. They should ensure that a thorough attempt has been made in the community to encourage parents to bring their exceptional children—or potentially exceptional children—to the school for assessment. Without this first important step, teachers are left without a data base for making referrals from the regular classroom and, many times, end up relying on "last year's performance records," anecdotal comments or hearsay about student performance. Since time is a critical factor in remediating skill gaps of exceptional learners, screening can be justified in the time it saves as compared with waiting for referrals.

SCREENING INSTRUMENTS

Screening instruments selected for use by regular classroom teachers need not be overwhelming. The most manageable screening instrument can be given to a group of students in a short period of time and provide meaningful information about student performance on basic skills important in "this classroom" in "this school."

To select a screening instrument for your classroom or your school, look for one which:

1. Reflects local district expectations and expectations of parents;
2. Can be administered by classroom teachers;
3. Directly assesses classroom skills;
4. Can be objectively scored; and
5. Yields results which are used in setting annual goals and establishing classroom programs.

1. *Reflects local district expectations.*

Assessment tools or procedures used by regular classroom teachers need not be complex to reflect local district expectations. By establishing within a district or within a school, skills critical at each grade level, educators can select assessment instruments which reflect those specific skills. Because as educators you are primarily responsible for developing students' preacademic and academic skills (mild and moderately handicapped) information RELATED to skill development in these areas is most relevant. If you are an instructor of severely/profoundly handicapped infants, children or youths, you will find input from parents, physical therapists (P.T.), occupational therapists (O.T.) and Communication Disorder Specialists to be highly beneficial.

On the following pages are sample worksheets for gathering the information which is necessary to complete a successful screening. By contacting appropriate personnel and requesting information about skills taught or skills "they" think should be taught, you have a good starting point for selecting the appropriate screening instrument or appropriate test subtests.

please assess . . .

skills/areas

parents	
tchr.	
cds	
ot/pt	

student: ____________________

skill planning sheet

	math	reading	other
Information from teachers in the grade one year *below* the student's current placement.			
Information from teachers in the student's *current* grade.			
Information from teachers in the grade one year *above* the student's current placement.			

*Indicates required skill mastery.

2. *Can be administered by the classroom teacher.*

Whenever possible, regular classroom teachers should administer the assessment information—expecially in schools where there are no self-contained classrooms. Tests administered outside the regular classroom or regular setting (the home for a severely/profoundly handicapped person, included) rarely provide educators with useful information for either identification or programming purposes. And since tests administered outside the regular setting are usually individually administered to only a few select children, teachers are rarely provided with information about student performance in relationship to the performance of peers in the regular setting.

For severely handicapped persons, tests or assessments which can be conducted, in part, by parents produce highly valuable and reliable data.

3. *Directly assesses classroom (or relevant) skills.*

Again, if you are working with non-handicapped or mildly/moderately handicapped persons, your obligation is to guide students in acquiring specific preacademic or academic skills. To do this, you need to assess current performance with an instrument which will directly assess those skills. While many, many assessment tools are available, it is surprising how few actually provide adequate sampling of skills important in your classroom. Some instruments will tell you how a child learns best (a learning modality), and others will tell you how creative your children are. It is up to you and your colleagues to select and utilize instruments which fit your needs.

Guidelines for selecting an instrument are included on the following page (technical considerations).

4. *Can be objectively scored.*

Results reported from any type of assessment should be data based and objectively reported. Instruments which rely on teacher judgment or subjective interpretation have marginal value. Since assessment information is used to identify potentially handicapped students and to plan instructional programs for children, it should be as concrete and reliable as possible. In short, assessments need to produce factual information.

5. *Yields results which can be used for setting goals and establishing instructional programs.*

Since a good deal of time will be spent selecting, administering and scoring a screening instrument, the instrument would provide teachers with information which is usable after the assessment is completed. The best instruments will be those which:

1. Provide information about which skills students *do* and *do not* have; and

2. If a student knows a skill, has he or she simply acquired the skill (and still needs more practice) or mastered the skill (is ready to move on to a more difficult task).

In short, the instrument needs to be usable not only on the day after it is given, but as a source of information throughout the year.

MAJOR CONSIDERATIONS

Validity: Does the screening or assessment instrument measure what it is supposed to measure?

Reliability: Is the instrument consistent? Does it produce the same results or the same kind of information across settings, across administrators, etc.?

Sensitivity: Does the instrument have the ability to make the kind of discriminations you want to make? Is it too difficult or too easy?

Appropriateness: Is it group or individual? What is the readability level of the instrument? Does the testing or assessment instrument contain language which might be confusing to some?

Objectivity: Is it very clear how the testing instrument is to be administered and scored? Is there only one way to score and answer?

Feasibility: What is the actual cost of obtaining and administering the instrument? Are specific skills required to administer the instrument? Can it be administered by regular or special classroom teachers? How much time does it take to administer, correct and score?

Major considerations from: Fox, David J. *The Research Process in Education*, Holt, Rinehart & Winston, New York, 1969.

OBSERVATIONAL DATA

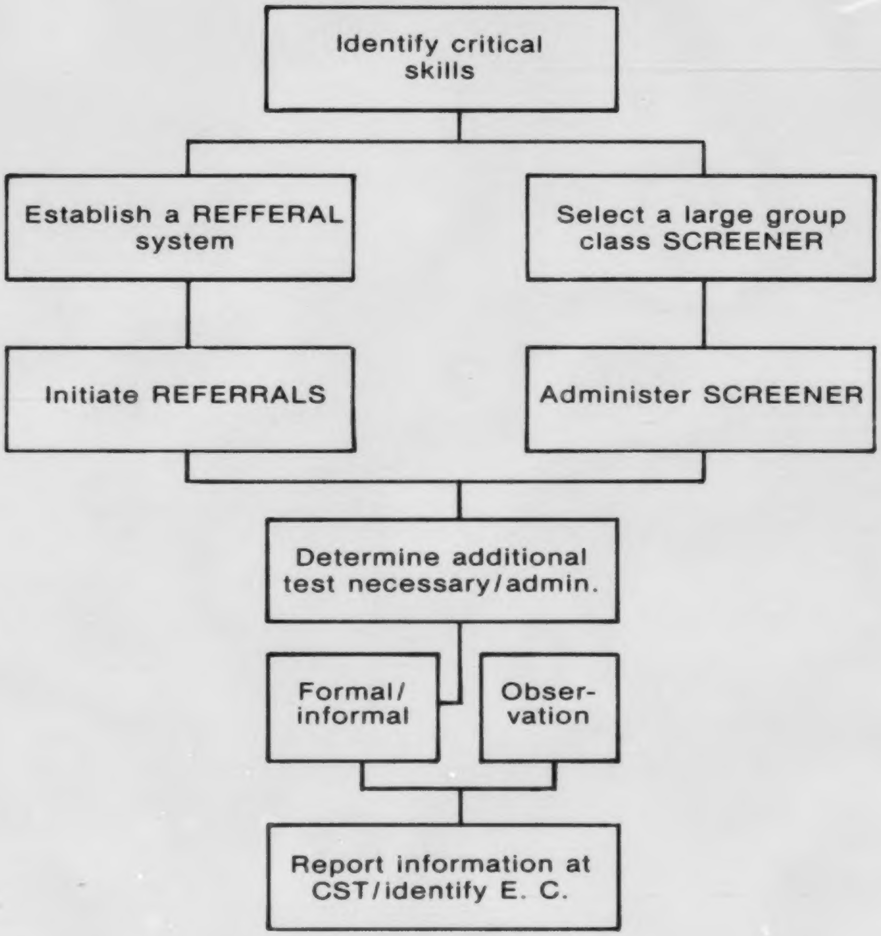
Many times skills of concern cannot be identified with a paper/pencil test. Especially for social and emotional behaviors, much data which is pertinent is collected through carefully planned observation by an educator. For example, Mick Alobe may be very good in Reading and Math but his classroom "coping skills" seem to be so low that instruction in the regular classroom is almost impossible. In this case, it is necessary to determine what constitutes "appropriate coping skills" and to target those things which Mick does which interfere or violate those skills. It is also important to determine the frequency or rate at which Mick demonstrates both appropriate and inappropriate behaviors. Most effectively, this is accomplished by observing and counting Mick's behavior *on several occasions*. By keeping a tally of Mick's "talk-outs," "out of seats," "banging books," etc. for a week, a teacher has objective data she or he can report to the child student team members. By taking count of behaviors elicited by a peer, the teacher can, as well, make comparisons about Mick's behavior with that of a class peer. That provides those making decisions about Mick's future placement with information about how severe or how discrepant Mick's behavior really is. (Observational forms and guidelines are provided in Modules 7 and 8.)

Observational data is also critical in assessing the skills of infants, preschool children (especially in the areas of language and communication) and severely/profoundly handicapped persons. By carefully observing how a child or youth functions (what he or she does or what he or she does not do) you can accumulate a record of behavior and behavior frequency which may be much more representative than any test. A good example is that of a severely handicapped youth who eats at home (an interview/observation technique) but who will not eat when you test for that skill directly.

INTERVIEW/OBSERVATIONAL DATA

Sometimes it will be impossible for you to observe or collect observational data in appropriate settings. In these cases, be sure that you seek the information from someone who does have access to the situation (i.e., parents in the home). By scheduling a 20 minute meeting with such persons, you can quickly obtain information which may prove to be invaluable in planning and goal setting.

PROCESS


Identify critical skills
Establish a REFFERAL system
Select a large group class SCREENER
Initiate REFERRALS
Administer SCREENER
Determine additional test necessary/admin.
Formal/ informal
Obser- vation
Report information at CST/identify E. C.

REFERRAL FORM

Name of Learner: ....

Your Name: ....

Age of Learner: .... Grade: ....

Date of Referral: ....

Why are you referring this learner (be very specific; include data if possible).

1. ....

....

2. ....

....

3. ....

....

4. ....

....

Is this learner currently receiving support services? ....

If YES, which services: ....

....

When is a good meeting/conference time for you? ....

....

PART TWO/SELECTION

In section one, criteria for test selection as it applies to screening instruments was discussed. In a sense, many of the same criteria which applied to these group administered tests apply also to individually administered tests which should validate the selection of students for special services identified initially through either the secreening or referral process.

In this section listings of individually administered tests in specific curriculum areas are provided. The listings are in no way complete; rather, they represent a cross section of the tools available in a given area. Hopefully, the listings will be sufficient to get you started in your search for appropriate assessment tools.

Tests and short critiques are provided in the following areas:

Reading,
Mathematics,
Perceptual-Motor and Visual Motor,
Auditory Perception,
Language/Intelligence, and
Developmental Scales and Vocational Tests.

CONSIDERATIONS . . .

- Does the test sample behaviors which have been identified as important?
    - by other teachers
    - by the learner's parents/guardians
    - by the school district
    - by the student
- Do the test items test for the skill directly?
    - are the responses open as opposed to forced-responses (true/false, multiple guess, etc.)
    - is the stimulus of the test item appropriate and meaningful?
    - is the response the student makes to the test item a response which would occur in the natural environment? (i.e., writes a spelling word as opposed to circling misspelled words).
- Are items repeated in different forms so that students respond to one type of problem on more than two occasions?
- Does the test check for acquisition of a skill or for both acquisition and fluency (proficiency, mastery)?
- Can the test be administered in the regular/normal setting?
- Can the test be administered by a person who works with the child/learner on a regular basis?
- Does the test result in information which is useful in planning instructional programs?
- Can the test be readministered throughout the year as a source of data to check student progress and teacher accountability?

reading tests

GATES-MCKILLOP READING DIAGNOSTIC TESTS

Authors: Gates and McKillop

Levels: Grades 2-6

Available from: Bureau of Publications
Teachers College
Columbia University
New York, NY 10027

Description: The Gates-McKillop is an individually administered measure of 28 reading skills. It yields 28 scores, one for each subtest, is normed but requires sophisticated interpretation skills.

DURRELL ANALYSIS OF READING DIFFICULTY

Authors: Durrell

Levels: Nonreader to 6th grade ability

Available from: Harcourt, Brace and Jovanovich, Inc.
757 Third Avenue
New York, NY 10017

Description: The Durrell "Analysis of Reading Difficulty" is individually administered. It includes measures of: (1) oral and silent reading; (2) listening comprehension; (3) word recognition and analysis; (4) visual memory of word forms; (5) auditory analysis of word elements; (6) spelling; and (7) handwriting. The objective scoring procedure yields grade level equivalencies. Also included are informal checklists of areas of difficulty and a profile chart.

PHONICS KNOWLEDGE SURVEY

Authors: Durkin and Meshouer, 1964

Levels: Grades 1-6

Available from: Teachers College Press
1234 Amsterdam Avenue
New York, NY 10027

Description: An informal test, the "Phonics Knowledge Survey" is an individually administered check of a pupil's knowledge of phonics. It is not normed and responses are simply marked as correct or error.

LEARNING METHODS TEST

Author: Mills, 1970

Levels: Primary

Available from: The Mills School
1512 E. Broward Blvd.
Fort Lauderdale, FL 33301

Description: The "Learning Methods Test" is an individually administered measure of a child's ability to learn new words utilizing various teaching procedures. The objective scoring procedure yields mean scores. However, subjective opinions of the teacher are necessary to determine what method of teaching is best.

BOTEL READING INVENTORY

Author: Botel, 1961

Levels: Grades 1-12

Available from: Follett Publishing Co.
1010 W. Washington Blvd.
Chicago, IL 60607

Description: The Botel is a measure of four reading levels and selected phonics and related skills. It is individually administered. The test is informal. It includes standards for interpreting scores and provides a guide for identifying appropriate reading level.

GATES-MACGINTIE READING TESTS

Authors: Gates and MacGintie

Levels: Grades 1-9

Available from: Teachers College Press
1234 Amsterdam Avenue
New York, NY 10027

Description: The Gates-MacGintie may be group or individually administered. It measures: (1) vocabulary; (2) speed (fluency); (3) accuracy; and (7) comprehension. It contains objective scoring procedures and an answer key; it yields grade scores but no interpretation of scores to classroom practice is provided.

DIAGNOSTIC READING SCALES

Author: Spache, 1963

Levels: Grades 1-8—exceptional pupils 1-12

Available from: McGraw Hill
1221 Ave. of the Americas
New York, NY 10020

Description: Individually administered, the "Diagnostic Reading Scales" measure: (1) word recognition; (2) oral reading at the instructional level; (3) silent reading at the independent level; (4) reading fluency (rate); (5) auditory comprehension; and (6) related phonics skills. The scoring procedures are objective. The grade norms lack standardization of the data.

CALIFORNIA PHONICS SURVEY

Authors: Brown and Cottrell

Levels: Grades 7-12 and college

Avaliable from: McGraw-Hill
1221 Ave. of the Americas
New York, NY 10020

Description: The "California Phonics Survey" may be group or individually administered using a tape. It is a measure of word attack and phonics skills. The objective scoring yields analysis scores on Form I and total score only on Form II.

PEABODY INDIVIDUAL ACHIEVEMENT TEST (Reading Recognition and Comprehension Subtests)

Authors: Dunn and Markwardt, 1970

Levels: Preschool to adult

Available from: American Guidance Service
Publisher's Building
Circle Pines, MN 55014

Description: The Peabody is individually administered. The reading subtests measure scholastic attainment of basic skills and knowledge in reading and reading related skills. It has objective scoring and yields grade and age equivalents, percentile ranks and standard scores.

WIDE RANGE ACHIEVEMENT TESTS (Word Recognition Subtest)

Authors: Jastak and Jastak, 1965

Levels: Kindergarten to college

Available from: Guidance Associates of Delaware, Inc.
1526 Gilpin Avenue
Wilmington, DE 19806

Description: The WRAT word recognition subtest is individually administered and measures letter recognition and word pronunciation. It may be objectively scored and yields raw scores, grade equivalents, percentiles and standard scores.

GRAY ORAL READING TEST

Author: Gray, 1963

Level: Grades 1-16

Available from: Bobbs-Merrill Co., Inc.
4300 E. 62nd Street
Indianapolis, IN 46206

Description: Individually administered, the "Gray Oral Reading Test" assesses oral reading skill and aids in diagnosis of reading difficulties. The objective scoring contains both fluency and accuracy measures; it yields grade equivalents.

GILMORE ORAL READING TEST

Authors: Gilmore and Gilmore

Levels: Grades 1-8

Available from: Harcourt-Brace and Jovanovich, Inc.
757 Third Avenue
New York, NY 10027

Description: The "Gilmore Oral Reading Test" is individually administered. It measures accuracy, comprehension and reading fluency. The objective scoring yields performance ratings, stanines, percentile ranks and grade norms.

WOODCOCK READING MASTERY TEST

Author: Woodcock, 1973

Levels: K-12

Available from: American Guidance Service
Publisher's Building
Circle Pines, MN 55014

Description: The Woodcock is individually administered. It measures: (1) letter identification; (2) word identification; (3) word attack skills; (4) comprehension (word); and (5) passage comprehension. It is objectively scored and yields grade and age scores, percentile ranks and standard scores. It contains separate norms for boys and girls(!)* The Woodcock also includes criterion-referenced interpretation of test performance.

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*Author's comment.

math
tests

KEY MATH DIAGNOSTIC TEST

Authors: Connolly, Nachtman and Pritchett, 1971

Levels: Preschool-grade 6

Available from: American Guidance Service
Publisher's Building
Circle Pines, MN 55014

Description: The "Key Math Diagnostic Test" is individually administered and measures: (1) content; (2) operations; and (3) applications. The 14 subtests can be objectively scored resulting in grade level equivalents. A diagnostic profile is included.

DIAGNOSTIC TESTS: SELF HELP IN ARITHMETIC

Author: Brueckner, 1955

Levels: Grades 3-12

Available from: California Test Bureau
5916 Hollywood Blvd.
Los Angeles, CA 90028

Description: The tests may be individually or group administered; orally administered in part. The tests cover all areas of fundamental operations with whole numbers, common fractions, and decimals. The scoring is objective but contains no norms. The manual provides suggestions for effective use of test results.

PEABODY INDIVIDUAL ACHIEVEMENT TESTS (Mathematics Subtest)

Authors: Dunn and Markwardt, 1970

Levels: Preschool to adult

Available from: American Guidance Service
Publisher's Building
Circle Pines, MN 55014

Description: The Peabody math subtests are individually administered measures of scholastic attainment in basic math skills and math conceptualization. The objective scoring procedures yield grade equivalents, percentile ranks and standard scores.

perceptual-motor/visual perception tests

DEVELOPMENTAL TEST OF VISUAL-MOTOR INTEGRATION (VMI)

Authors: Beery and Buktenica, 1967

Levels: Ages 2-8

Available from: Follett Educational Corporation
1010 W. Washington Blvd.
Chicago, IL 60607

Description: Individually or group administered, the VMI provides educational assessment of visual-motor skills including reproduction of geometric forms. The scoring is somewhat subjective; it is based on guidelines provided by the authors.

DEVELOPMENTAL TEST OF VISUAL PERCEPTION (DTVP)

Author: Frostig, 1966

Levels: Ages 3-8

Available from: Consulting Psychologists Press, Inc.
557 College Avenue
Palo Alto, CA 94306

Description: The DTVP may be individually or group administered. It measures: (1) eye-motor coordination; (2) figure-ground discrimination; (3) form constancy; (4) position in space; and (5) spatial relations. The scoring is objective and yields raw scores which are converted to scale scores; the final scoring result is a "perceptual quotient."

THE PURDUE PERCEPTUAL-MOTOR SURVEY

Authors: Roach and Kephart, 1966

Levels: Ages 6-10

Available from: Charles E. Merrill Publishing Company
1300 Alum Creek Drive
Columbus, OH 43216

Description: The Purdue is individually administered. Its primary function is to aid in the identification of children with perceptual-motor problems. Scoring results in qualitative scales which designate needed areas of remediation.

PUPIL RECORD OF EDUCATIONAL BEHAVIOR

Author: Cheves

Levels: Preschool to upper primary

Available from: Teaching Resources Corp.
100 Bolyston Street
Boston, MA 02116

Description: Individually administered, the "Pupil Record of Educational Behavior" measures: (1) visual-motor perception; (2) auditory perception; (3) language perception; (4) language development; and (5) math concepts. The test is informal. It contains no norms and yields only a profile of student levels and patterns of functioning across basic skill areas.

BENDER VISUAL-MOTOR GESTALT TEST

Author: Bender, 1938

Levels: Ages 5-11

Available from: American Orthopsychiatric Association

Description: The Bender-Gestalt test is an individually administered measure of visual motor perception. The student responses (designs) are judged in terms of distortion, rotation, perseveration, method of reproduction and other factors. Derived scores yield grade equivalents and developmental age.

MULTIPLE CHOICE BENDER (Experimental Copy)

Authors: Foster and Sabatino

Levels: Ages 6-11

Available from: Model LD Systems
1247 E. College Ave.
State College, PA 16801

Description: The experimental copy of the "Multiple Choice Bender" is individually administered. It measures visual discrimination abilities with motoric component eliminated. Two phases of administration allow the student to respond more than once to all items missed. The objective scoring results in raw scores which can be converted into age equivalent scores or standard scores.

auditory perception tests

AUDITORY DISCRIMINATION TEST

Author: Wepman, 1958

Levels: Ages 5-8

Available from:
Language Research Associates
Box 95
950 East 59th Street
Chicago, IL 60637

Description: The "Auditory Discrimination Test" is individually administered. It measures auditory discrimination and the objective scoring procedures yield an age equivalent.

BROWN-CARLSON LISTING COMPREHENSION TEST

Authors: Brown and Carlson, 1955

Levels: Grades 9-12

Available from:
Harcourt, Brace and World, Inc.
757 Third Avenue
New York, NY 10017

Description: Group administered, this test measures immediate recall, following directions, recognizing transitions, recognizing word meanings and lecture comprehension. Raw scores are entered as the number correct. Raw scores may be converted to standard scores and percentiles; the test also includes an expectancy chart with deviation IQ.

TEST OF AUDITORY PERCEPTION (Experimental Copy)

Authors: Sabatino and Foster, 1974

Levels: Grades K-6

Available from:
Model Learning Disabilities Systems
1247 East College Ave.
State College, PA 16801

Description: Individually administered with the use of tapes, the Sabatino-Foster test contains three subtests which measure: (1) phoneme discrimination; (2) word recognition; and (3) auditory sequencing. The scoring is objective and yields raw scores and age equivalent scores.

SCREENING TEST FOR AUDITORY PERCEPTION

Authors: Kimmel and Wahl, 1969

Levels: Grades 2-6

Available from: Academic Therapy Publications
1539 Fourth Street
San Rafael, CA 94901

Description: Group or individually administered, the tester can select to use the guide or the tapes. The test covers the following: (1) vowels; (2) consonants; (3) rhyming words; (4) sound patterns; (5) word differences; and (6) a combination of auditory skills. The scoring yields percentile ranks for age and grade levels.

KINDERGARTEN AUDITORY SCREENING TEST

Author: Katz, 1971

Levels: Preschool and Grade 1

Available from: Follett Educational Corporation
1010 W. Washington Blvd.
Chicago, IL 60607

Description: The "Kindergarten Auditory Screening Test" is group administered. It measures auditory figure-ground, sound blending, and auditory discrimination. It is a screening device only.

language/ intelligence tests

BOEHM TEST OF BASIC CONCEPTS

Author: Boehm, 1970

Levels: Kindergarten through Grade 2

Available from: Psychological Corporation
304 East 45th Street
New York, NY 10017

Description: The "Boehm Test of Basic Concepts" can be group or individually administered. It assesses beginning school and child knowledge of frequently used basic concepts (50 concepts tests). While the scoring is objective, caution should be taken in interpreting the obtained scores.

PEABODY PICTURE VOCABULARY TEST (PPVT)

Author: Dunn, 1959

Levels: Ages 2.5 to 18

Available from: American Guidance Service
Publisher's Building
Circle Pines, MN 55014

Description: The PPVT is individually administered. It measures a learner's vocabulary comprehension. It may be objectively scored yielding total score, percentile rank, mental age or standard score deviation IQ.

VERBAL LANGUAGE DEVELOPMENT SCALE

Author: Mecham, 1959

Levels: Birth to 15

Available from: Education Test Bureau
Division of American Guidance Service
720 Washington Avenue
Minneapolis, MN 55514

Description: The informal-interview method is used in administration of the "Verbal Language Development Scale" test. Its primary function is to measure language development. The scores are expressed in scales which correspond with language ages and also age equivalents.

PICTURE STORY LANGUAGE TEST

Author: Myklebust, 1965

Levels: Ages 7-17

Available from: Grune and Stratton, Inc.
757 Third Avenue
New York, NY 10017

Description: Individually administered, the test provides a developmental scale for written language. The scales measure length, correctness of expression and attempts to measure meaning of sentences. The scoring is sometimes objective via counting and rating. Norms are provided.

SLOSSON INTELLIGENCE TEST FOR CHILDREN AND ADULTS

Author: Slosson, 1963

Levels: All ages

Available from: Slosson Educational Publications, Inc.
140 Pine Street
East Aurora, NY 14052

Description: The Slosson is individually administered. It is a verbally loaded test which attempts to measure intelligence and correlates highly with the Stanford-Binet Intelligence Scale. Most items are highly objective—others subjective (verbal response items, especially). The test yields mental age which may be used to compute IQ scores.

developmental tests

AAMD ADAPTIVE BEHAVIOR SCALE

Author: Fogelman, C. J. (Editor)

Mode: Scales

Available from: American Association of Mental Deficiency
5201 Connecticut Ave. N.W.
Washington, DC 20015

Price: $5 per manual
$1 per scale, scoring sheet, profile summary

Subtests:

1. Developmental independence
    - A. Independent functioning
        1. Eating
        2. Toilet use
        3. Cleanliness
        4. Appearance
        5. Care of clothing
        6. Dressing and undressing
        7. Travel
        8. General independent functioning
    - B. Physical development
        1. Sensory development
        2. Motor development
    - C. Economic activity
        1. Money handling and budgeting
        2. Shopping skills
    - D. Language development
        1. Expression
        2. Comprehension
        3. Social language development
    - E. Numbers and time
    - F. Domestic activity
        1. Cleaning
        2. Kitchen duties
        3. Other domestic activities
    - G. Vocational activity
    - H. Self-direction
        1. Initiative
        2. Perseverance
        3. Leisure time
    - I. Responsibility
    - J. Socialization

2. Maladaptive behavior
    - A. Violent and destructive behavior
    - B. Antisocial behavior
    - C. Rebellious behavior
    - D. Untrustworthy behavior
    - E. Withdrawal
    - F. Stereotyped behavior and odd mannerisms
    - G. Inappropriate interpersonal mannerisms
    - H. Unacceptable vocal habits
    - I. Unacceptable or eccentric habits
    - J. Self-abusive behavior
    - K. Hyperactive tendencies
    - L. Sexually aberrant behavior
    - M. Psychological disturbances
    - N. Use of medications

ASSESSING PERCEPTUAL MOTOR FUNCTIONING: CHECKLIST

Source: Allegheny Intermediate Unit No. 3

Format: Rating scale: 0=cannot; 1=partial success; 3=independent

Available from: Allegheny Intermediate Unit No. 3
Suite 1300, Two Allegheny Center
Pittsburgh, PA 15212

Subtests:

1. Body image
    - A. Identification of body parts
    - B. Assembling of body parts
    - C. Identification of body planes
    - D. Directionality
    - E. Development of dominance
2. Gross movement experiences
    - A. Specific body part movement
    - B. Total body movement integration
    - C. Body management proficiency
3. Specific coordination skills
    - A. Eye movements
    - B. Lip, tongue, and jaw movements
    - C. Hand and finger movements
    - D. Eye-body integrated coordination

BASIC SKILLS SCREENING TESTS

Authors: Schalock, R. L., Ross, B. E. and Ross, I.

Format: Raget behaviors—evaluation procedure
80%—pass/fail

Available from: Mid-Nebraska Mental Retardation Services
Region III
518 East Side Blvd.
Hastings, NB 68901

Cost: $25

Subtests:

1. Sensory motor functioning
    - A. Eye-hand coordination
    - B. Static balance
    - C. Dynamic balance
    - D. General coordination
    - E. Spatial orientation
2. Visual processing
    - A. Attention
    - B. Discrimination
    - C. Visual motor
    - D. Visual association
3. Auditory processing
    - A. Attention
    - B. Discrimination
    - C. Auditory memory
    - D. Auditory association
4. Language
    - A. Receptive language
    - B. Expressive language
5. Symbolic operations
    - A. Reading
    - B. Printing and writing
    - C. Arithmetic
    - D. Concept formation
    - E. Problem solving
6. Social-emotional development
    - A. Self-identity
    - B. Social behavior
    - C. Group activities
    - D. Independence

7. Work skills
    A. Attending
    B. Responsibility
    C. Performance
    D. Tool awareness and use

BALTHAZAR SCALES OF ADAPTIVE BEHAVIOR

Author: Balthazar, E. E.

Format: Direct observation

Available from: Consulting Psychologists Press, Inc.
577 College Ave.
Palo Alto, CA 94306

Section I: Scales of Functional Independence (eating, dressing, and toileting)

Section II: Eight categories describing adaptive and maladaptive social behavior

BEHAVIORAL CHARACTERISTICS PROGRESSION (BCP)

Format: Direct observation
Categories of behaviors (strands) broken down into 2400 behavioral characteristics

Available from: Santa Cruz County Office of Education
701 Ocean Street, Room 200
Santa Cruz, CA 95060

THE CALLIER-AZUSA SCALE

Author: Stillman (Editor)

Format: Specific criteria/scale score

Available from: Callier Center for Communication Disorders
1966 Inwood Road
Dallas, TX 75235

Subtests:

1. Motor Development
    A. Postural control
    B. Locomotion
    C. Fine motor
    D. Visual motor

2. Perceptual abilities
    A. Visual development
    B. Auditory development
    C. Tactile development
3. Daily living skills
    A. Dressing and undressing
    B. Personal hygiene
    C. Development of feeding skills
    D. Toileting
4. Language development
    A. Receptive language
    B. Expressive language
    C. Development of speech
5. Socialization
    A. Socialization
    B. Development of self concept

CAMELOT BEHAVIORAL CHECKLIST

Author: Foster, R. W.

Format: Checklist

Available from: Camelot Behavior Systems
P.O. Box 607
Parsons, KS 67357

Costs: $2.50 per manual; $0.25 per checklist

Subtests:

1. Self-help
    A. Eating
    B. Dressing and undressing
    C. Toilet use
    D. Care of own health
    E. Knowledge of self
    F. Bathing
    G. Hair care
    H. Grooming
2. Physical development
    A. Balance
    B. Walking
    C. Posture
    D. Body movements
    E. Hand movements
    F. Sensory development

3. Home duties
    - A. House cleaning
    - B. Walking
    - C. Posture
    - D. Yard care
    - E. Car maintenance
    - F. Operation of appliances
4. Vocational behavior
    - A. Work related skills
    - B. Job skills
5. Economic behavior
    - A. Shopping
    - B. Money handling
    - C. Use of credit
6. Independent travel
    - A. Transportation
    - B. Travel skills
7. Numerical skills
    - A. Arithmetic skills
    - B. Time
8. Communication skills
    - A. Receptive language
    - B. Expressive language
    - C. Reading
    - D. Writing
    - E. Use of telephone
9. Social behavior
    - A. Spectator activities
    - B. Participation activities
    - C. Interaction with others
10. Responsibility
    - A. Social responsibility
    - B. Response to emergencies
    - C. Security

DENVER DEVELOPMENTAL SCREENING TEST

Authors: Frankenburge, W. K. and Dodds, J. D.

Format: Checklist (report, test)

Available from: Ladoca Project and Publishing Foundation
Denver, CO

Subtests:

1. Personal social

2. Fine motor adaptive
3. Language
4. Gross motor

DEVELOPMENTAL PINPOINTS

Authors: Gross, P., Chohen, M., and Haring, N.

Format: Checklist

In N. G. Haring and L. Brown (Eds.), *Teaching the Severely Handicapped: A Yearly Publication of the American Association for the Education of the Severely/Profoundly Handicapped* (Vol. 1). New York: Grune and Stratton, 1976.

Subtests:

1. Fine motor
   - A. Head
   - B. Wrists
   - C. Hands
   - D. Eye-hand
   - E. General
2. Gross motor checklist
   - A. Maintains static balance
   - B. Maintains dynamic balance
   - C. Maintains general coordinated movement
3. Information checklist
   - A. Exhibits reflexes
   - B. Exhibits contracture
   - C. Athetosis
   - D. Cerebral palsy
   - E. Needs prosthesis
   - F. Needs other positioning when not sitting
4. Range of motion checklist
   - A. Neck
   - B. Left and right shoulder
   - C. Left and right elbow
   - D. Left and right wrist
   - E. Left and right hands
   - F. Left and right thumbs
   - G. Left and right hips
   - H. Left and right knees
   - I. Left and right ankles
   - J. Left and right toes

5. Receptive language
    - A. Responds to sounds
    - B. Responds to verbal requests
6. Expressive language
    - A. Makes gestures
    - B. Makes sounds
    - C. Says words
7. Pre-reading
8. Pre-writing
9. Pre-math
10. Music
11. Self-help skills
    - A. Eating and drinking
    - B. Dressing
    - C. Toileting
    - D. Washing
    - E. Giving general information about self
12. Social
    - A. Establishes self-other discrimination
    - B. Establishes dependence, independence
    - C. Establishes play activities
    - D. Helps others

DOWN'S SYNDROME ASSESSMENT INVENTORY FORMS

Authors: Hayden, A. H. and Dmitriev, V.

Format: Checklists

Available from: Experimental Education Unit
Child Development and Mental Retardation Center
University of Washington
Seattle, WA 98195

Subtests:

1. Infant assessment form
    - A. Gross motor
    - B. Fine motor
    - C. Language
        - 1. Receptive
        - 2. Expressive
    - D. Personal-social
2. Early preschool assessment form
    - A. Gross motor
    - B. Puzzles and form boards
    - C. Color matching

- D. Color selecting
- E. Lotto matching
- F. Writing
- G. Self-help
- H. Self-image
- I. Language
  - 1. Receptive
  - 2. Expressive
    - a. Nouns
    - b. Verbs
    - c. Prepositions
    - d. Adjectives
    - e. Academics

3. Intermediate preschool assessment form
   - A. Color matching
   - B. Color selecting on cue
   - C. Lotto matching
   - D. Puzzles
   - E. Self-help skills
   - F. Self-image
   - G. Language
   - H. Academics
4. Advance preschool
   - A. Sorting colors
   - B. Lotto matching
   - C. Writing
   - D. Self-image
   - E. Self-help
   - F. Language
   - G. Academics
   - H. Reading recognition
   - I. Gross motor
5. Kindergarten assessment form
   - A. Art and writing
   - B. Science
   - C. Self-help
   - D. Play skills
   - E. Gross motor
   - F. Academics
   - G. Language
   - H. Calendar
   - I. Miscellaneous
6. Primary A—assessment form
   - A. Gross motor

B. Fine motor
C. Cognitive
D. Academics
E. Self-help and living skills
F. Play skills
G. Art, P. E., and music
H. Miscellaneous

LEARNING ACCOMPLISHMENT PROFILE (LAP)

Author: Sanford, A. R. (Ed.)

Format: Direct observation

Available from: Chapel Hill Training-Outreach Project
Student Stores
Daniels Building
University of North Carolina at Chapel Hill
Chapel Hill, NC 27514

Price: $1.50

Subtests:

1. Gross motor
2. Fine motor
3. Social
4. Self-help
5. Cognitive
6. Language

Additional Materials: Record booklet containing developmentally appropriate list of behaviors, guide in sequencing skill development, and curriculum units.

A MANUAL FOR THE ASSESSMENT OF A DEAF-BLIND MULTIPLE HANDICAPPED CHILD

Authors: Collins, M. T. and Rudolph, J. M.

Format: Checklist

Available from: Midwest Regional Center for Services to Deaf-Blind Children
P.O. Box 420
Lansing, MI 48902

Subtests:

1. Personal self-help

2. Social development
3. Gross motor development
4. Fine motor development
5. Language
6. Cognition

PENNSYLVANIA TRAINING MODEL INDIVIDUAL ASSESSMENT GUIDE

Authors: Somerton, E. M. and Turner, K. D.

Format: Checklists

Available from: Pennsylvania Training Model
123 Foster Street
Harrisburg, PA 17102

Cost: $3.25

Subtests:

1. Sensory development
    - A. Auditory discrimination
    - B. Tactile discrimination
    - C. Visual discrimination
2. Gross motor
3. Fine motor
4. Self-help
    - A. Feeding, drinking
    - B. Toileting
    - C. Dressing
    - D. Washing and bathing
    - E. Nasal hygiene
    - F. Oral hygiene
5. Communication
6. Perceptual cognitive
7. Social interaction

Additional materials:

1. Planning sheet
2. Continuous data charts
3. Functional program flow chart

THE PORTAGE GUIDE TO EARLY EDUCATION

Authors: Shearer, D., Billingsley, J., Frohman, A., Hilliard, J., Johnson, F., and Shearer, M.

Format: Checklist

Available from: Cooperative Educational Service Agency No. 12
Portage, WI 53901

Cost: $32

Subtests:
1. Cognition (86 items)
2. Self-help (80 items)
3. Motor (97 items)
4. Language (88 items)
5. Socialization (69 items)

Additional materials:
1. Suggested material to teach the behavior
2. A list of activities or curriculum ideas on how to teach the behavior

A PROGRAMMATIC GUIDE TO ASSESSING SEVERELY/ PROFOUNDLY HANDICAPPED CHILDREN

Authors: Crebo, R. and Heifetz, J.

Format: Checklist (covers age range 0 to 60 months)

Available from: Experimental Education Unit
Child Development and Mental Retardation Center
University of Washington
Seattle, WA 98195

Subtests:
1. Self-help skills
    - A. Feeding
    - B. Toileting
    - C. Personal hygiene
    - D. Dressing and undressing
2. Communication
    - A. Receptive language
    - B. Expressive language
3. Gross motor
    - A. Head control
    - B. Arm control
    - C. Leg control
    - D. Rolling
    - E. Crawling
    - F. Sitting

4. Fine motor
    - A. Eye readiness
    - B. Hand readiness
5. Sensory discrimination
    - A. Visual discrimination
    - B. Tactile discrimination
    - C. Auditory discrimination
6. Pre-academics
    - A. Pre-math
    - B. Pre-writing
    - C. Pre-reading

PROGRESS ASSESSMENT CHART OF SOCIAL DEVELOPMENT

Author: Gunzburg, H. C.

Format: Dichotomous (yes/no—not tested)

Available from: PAC Department
P. O. Box 398
Bristol, IN 46507

Subtests:

1. Self-help (5 major categories)
2. Communication (5 major categories)
3. Socialization (5 major categories)
4. Occupation
    - A. Manual activities
    - B. Leisure occupations
    - C. Ratings of regular (daily) work performance
        1. Application
        2. Quality and accuracy
        3. Speed and output
        4. Reliability
        5. Time keeping
        6. Care of tools and materials

SPECIAL EDUCATION OBJECTIVE CHECKLIST DEVELOPMENTAL PROGRAM

Source: Tacoma, Washington Public Schools

Format: Checklist (date accomplished)

Available from: Pupil Personnel Services
Tacoma Public Schools
Tacoma, WA 98401

Subtests:

1. Self-help skills
   - A. Dressing
   - B. Feeding
   - C. Personal hygiene
     1. Toilet training
     2. Grooming
     3. Menstrual care
     4. Dental care
     5. Bathing
   - D. Home living
     1. Home care/general
     2. Home care/kitchen
     3. Home care/bathroom
     4. Home care/bedroom
     5. Home care/washing and ironing
     6. Cooking
     7. Sewing
2. Social skills
   - A. Interaction
   - B. Self-control
   - C. Safety
   - D. Survival words
3. Language development skills
   - A. Receptive (verbal)
   - B. Expressive (verbal)
   - C. Language
4. Academic skills
   - A. Performance terms
   - B. Mathematics
   - C. Writing
5. Motor skills
   - A. Gross motor
   - B. Visual motor
   - C. Auditory motor
   - D. Tactile motor
   - E. Body concepts
6. Leisure time skills
   - A. Handicrafts
   - B. Woodworking
   - C. Clay
   - D. Miscellaneous crafts
   - E. Activities—individual
   - F. Activities—team

THE STUDENT PROGRESS RECORD

Source: MR/DD Program

Format: Dichotomous checklist (yes/no—not tested)

Available from: MR/DD Program Office
Mental Health Division
2575 Bittern Street N.E.
Salem, OR 97310

Subtests:

1. Social skills
2. Receptive language
3. Expressive language
4. Reading
5. Writing
6. Number concepts
7. Money
8. Time
9. Eating
10. Dressing
11. Personal hygiene
12. Motor skills
13. Physical fitness

THE TRAC ASSESSMENT INVENTORY FOR RETARDED CHILDREN

Authors: Sailor, W. and Bonnie, J. M.

Format: Scale score (numbered)

Available from: Topeka Association for Retarded Children, Inc.
Community Center for the Mentally Retarded
2701 Randolph
Topeka, KS 66611

Cost: $5.95 for instruction manual and 10 assessment inventories

Subtests:

1. Self-help
    - A. Toileting
    - B. Washing
    - C. Eating
    - D. Clothing management
2. Motor skills
    - A. Small muscle coordination
    - B. Large muscle coordination

3. Pre-academic skills
4. Communication skills
    A. Receptive speech
    B. Expressive speech
    C. Pre-academic skills
5. Social skills
    A. In a group
    B. As an individual
    C. Following directions
    D. Interactions with adults
    E. Interactions with peers
    F. Cooperation in group activities
    G. Emotional control
    H. Pre-academic skills

TMR PERFORMANCE PROFILE FOR SEVERELY AND MODERATELY RETARDED

Authors: DiNola, A. J., Kaminsky, B. P., and Sternfeld, A. E.

Format: Rating scale

Available from: Educational Performance Associates
563 Westview Ave.
Ridgefield, NJ 07657

Cost: $5 for manual, record booklet and chart

Subtests:
1. Social behavior
    A. Self-control
    B. Personality
    C. Group participation
    D. Social amenities
2. Self-care
    A. Bathroom and grooming
    B. Dealing with food
    C. Clothing
    D. Safety
3. Communications
    A. Modes of communication
    B. Listening
    C. Language activities
    D. Language skills

4. Basic knowledge
    A. Information
    B. Numbers
    C. Awareness
    D. Social skills
5. Practical skills
    A. Tools
    B. Household items
    C. Family chores
    D. Vocational readiness
6. Body usage
    A. Coordination
    B. Health habits
    C. Fitness
    D. Eye-hand coordination

UNIFORM PERFORMANCE ASSESSMENT SYSTEM (UPAS)

Source: Experimental Education Unit, University of Washington

Format: Criterion based checklist

Available from: Experimental Education Unit
University of Washington WJ-10
Seattle, WA 98195

Level 1: 0-6 years

Subtests:
1. Gross motor
2. Pre-academic
3. Communication
4. Social/self-help

Cost, Level 1: $10

Level 2: 6-12 years

Subtests:
1. Math
2. Reading
3. Social/self-help
4. Language
5. Gross motor

Cost, Level 2: $12.50

VOCATIONAL INFORMATION AND EVALUATION WORK SAMPLES (VIEWS)

Authors: Maudelbaum, B. L., Rosen, G., and Miller, M.

Format: Work samples; training and production criteria

Available from: Jewish Employment and Vocational Service
1624 Locust Street
Philadelphia, PA 19103

Cost: $5,900 includes materials and special training for administration.

Subtests/tasks:

1. Tile sorting
2. Nuts, bolts, and washer sorting
3. Paper count
4. Paper cutting
5. Collating and stapling
6. Stamping
7. Nut weighing
8. Nut, bolts and washers assembly
9. Valve disassembly
10. Screen assembly
11. Mail sorting
12. Mail count
13. Machine feeding
14. Valve assembly
15. Circuit board assembly
16. Drill press

PART THREE/ UTILIZATION

Information obtained from assessments should provide information to:

1. The person who initiated the referral; or
2. The regular classroom teacher or whoever administered the screener;
3. The Child Study Team members:
   - A representative from the district;
   - Appropriate educators;
   - The learner's parents/guardians; and
   - The student.

Information derived from total class or group screening should also:

1. Identify skills mastered and not mastered by each student;
2. Group students according to skill-ability;
3. Provide information about error patterns for individual learners as well as groups of learners; and
4. Provide a record of student progress from one year to the next or from one part of the year to the end of the year.

On the following page is a "Student/Subtest Worksheet" which has proven to be very helpful to teachers in the utilization of assessment data. By entering the students' names across the top and by entering the test (or subtests/items) administered in the left-hand column, teachers can then enter student scores in individual cells. Once the sheet is completed, teachers can often spot particular patterns of strength or weakness for individual students. By highlighting the cells of students who have mastered skills in one color and those of students who have acquired skills in another, they also find they have a good starting point for grouping students according to skills.

subtests students						

Additional Readings

Alper, Nowlin, Lemonine, Perine, and Bettencourt. "The Rated Assessment of Academic Skills." *Academic Therapy*, Winter, 1973-74, *9*, (3), 151-164.

Eaton & Lovitt. "Achievement Tests vs. Direct and Daily Measurement." In *Behavior Analysis and Education*, 1972, George Semb, editor. University of Kansas Support and Development Center.

Hoephner and Nummedal, editors. *CSE-ECRC Test Evaluations: Preschool and Primary Grades*. Education Research and Development, UCLA Graduate School of Education, Los Angeles, California.

Lovitt, T. "Assessment of Children with Learning Disabilities," *Exceptional Children*, December, 1967.

MacGliocca, Rinaldi, Crew, and Kunzelmann. "Early Identification of Handicapped Children Through a Frequency Sampling Technique." *Exceptional Children*, April, 1977.

Gearheart, B. and Willenberg, E. *Application of Pupil Assessment Information: for the Special Education Teacher*. Love Publishing Co., Denver, Colorado, 1974.

Nevada
3

CLASSROOM MATERIALS

Module Three of the *Nevada Teachers' Resource Kit* is a product of
The Nevada Department of Education, Special
Education Division.

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PURPOSE

Perhaps the most common mental image of a teacher is that of an adult asking children to "take out this or that book," "turn to this or that page," or "complete this or that ditto." While this simple picture is not totally accurate, it does depict teachers in a primary role: the great materials consumer!

Material utilization is indeed a task which teachers engage in a great deal of the time. But the mere utilization of materials does not make for an effective teacher or, subsequently, for an effective learner. What does accomplish these ends is the combination of carefully selected materials and dynamite instructional delivery.

This module, "Classroom Materials: Their Selection, Modification and Evaluation," is designed to provide you with information which should guide your selection and utilization of classroom materials. The end result should be happier students and a happier you.

ORGANIZATION

This module's central themes include:

Part One: *Selection of Materials*
Part Two: *Evaluation of Materials*
Part Three: *Modification of Materials*

Part One, Materials Selection, provides a listing of commercial materials covering a wide range and variety of preacademic and academic materials at various grade levels. Obviously the list is in no way complete. Its primary purpose lies in providing you a starting point. The listing of commercial publishing houses included at the end of the section should help you obtain catalogues of additional materials.

Part Two, Evaluation of Materials, identifies procedures for reviewing the quality and usability of both commercially produced or teacher-made materials. Those serving on curriculum development or materials selection committees should find this section especially valuable.

Part Three deals with how to modify materials which are either teacher-made or commercially produced. Those of you operating within tight budget constraints may find this section pertinent.

Lastly, as in Module Two and in Modules Four through Nine, a list of additional readings concludes Module Three of the *NTRK*.

PART ONE/SELECTION

Selecting materials can be bothersome but it doesn't have to be life-threatening. By employing a few simple guidelines you can reduce your level of anxiety and complete the task with a feeling of survival and of a job well done.

Part One of Module Four provides you with guidelines for selecting materials. It points out issues which you will want to consider *before you purchase a material*. Later portions of the module will explain what to do with a material once you have it.

BEFORE YOU SELECT A MATERIAL

Before you purchase a material you must know:

1. Who you will teach (i.e., Tracey, Joan or John);
2. The GOALS towards which you will teach (i.e., reading, dressing, volleyball);
3. The specific skills your students are expected to perform at the end of instruction; and
4. The materials currently available to teach such skills.

On the following pages each of these issues is briefly discussed. If you already engage in one or all of these activities, there might not be much purpose in reading all the explanations: on the other hand, if you're a person who has not engaged in such activities prior to purchasing materials, the explanations may provide the rationale you've been waiting for and methods on how to accomplish the task.

1. *Identify Your Students.*

Believe it or not, it is nearly impossible for you to efficiently select materials for use throughout the school year until you first know who you will teach. Obviously, it will make a great deal of difference whether you are assigned to teach academics or physical education. It will also make a great deal of difference whether you teach first, fifth or seventh graders or whether you teach Tracey who is deaf or Munch who is blind. While having a good, general idea of your teaching population is helpful, exact identification of students, by name, is best.

If you're a special educator, every student you instruct will have been identified by a Child Study Team (CST). This means that you should never serve a child unless she or he has been reviewed by this panel. To determine which students in your school have been identified for service following Child Study Team meetings, ask your building principal or building administrator. If she or he doesn't know, contact the director of special education. Never assume that you will just teach last year's kids. After all, you did such a good job with them they're probably already on their way to the top 10 in the regular classroom!

2. *Identify Student Goals and Current Levels of Performance.*

Along with every exceptional student now comes a listing of "things to be learned" or *goal statements*. Goal statements tell, in a general way, what Linda needs to learn by the end of the school year (i.e., independent dressing, self-feeding and walking with a cane). Goal statements are usually written at the time of the Child Study Team meeting. If, for some reason, the goal statements you receive are not written or only written very loosely, write them yourself using the information available. If you do not have enough information to write complete and accurate goal statements, ask that the Child Study Team reconvene to accomplish the task.

Accompanying each goal statement should be a brief description of the student's current level of performance. This information is a key in determining exactly where a student is in a sequence or in determining exactly what skills the student has already mastered. As with goal statements, press your colleagues to provide accurate and precise statements of current levels of performance. Professionals who completed various assessment activities should be your prime source of information.

3. *Identify Sequences of Skills.*

A sequence is an ordered listing of tasks starting with the first or easiest skill and ending with the last or most difficult skill. In most goal areas, sequences have been defined somewhere, by someone, for your use. Therefore, don't worry about inventing or creating new sequences for everything you teach. Locate already developed sequences by methods suggested in Module Five of the *NTRK*. Modify the ones you find by adding steps (making them more detailed), deleting steps (making a longer sequence more compact), reordering steps and so forth. In selecting or modifying (or, if worse comes to worse, developing a sequence) keep the following in mind:

- Do you want to progress from the easiest skill to the most difficult (e.g., reading skills, math skills and most academics)?
- Do you want to start with the first skill in an established sequence and progress to the last sequence step (e.g., phonics workbooks, social skills workbooks, etc.)?
- Do you want to start with the last skill and work backward until you reach the first step (e.g., shoe tying, dressing skills, etc.)?
- Do you want to start in the middle of a sequence and teach skills both above and below your selected starting point (e.g., vacuuming, mowing the lawn, etc.)?

4. *Identify Materials Currently Available to Teach Desired Skills.* Most professionals and parents who send children your way have a good idea of what they expect the student to be able to do by the end of the year. Most regular classroom teachers can tell you that they want their students to be able to recite as well as write the multiplication tables or write a creative paragraph as well as correct the punctuation on one from a workbook. Likewise, parents of very young or severely handicapped children or youth will be able to tell you that they want Mark to be able to zip as well as button; flip on light switch as well as turn the dimmer. For these reasons, it is very important that you seek out the most precise expectations possible. One very good way of doing this is to ask for a list of available or suggested materials for use.

As you seek out available material lists from teachers who serve, have served or will serve students you work with, look through the materials and confirm with your colleague the types of responses required in the material. Do you really want Nancy to be able to circle pictures which begin with "A" or do you want her to be able to "say /a/" when she sees the letter "A"? Talk about the material and decide if it is *the* material to use or one of several materials which they might recommend. Once a decision is made to use a particular text or workbook or sequence of feeding skills, locate copies of the materials for your use.

In locating existing materials to teach specific skills, it is also helpful to talk with other teachers who have taught the same skills in the past. Many times these professionals are able to tell you which materials or which parts of materials are particularly effective—and of course, which ones to avoid.

MATERIALS AVAILABLE

STUDENT **GOAL**

Specific skills and type of response	Recommended materials
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.
11.	11.
12.	12.

MATERIALS

Student ....

Goal Area ....

Cooperating Instructor(s) ....

Specific skills to be mastered	Materials used in the regular class	Recommended materials

INSTRUCTIONAL MATERIALS

As we've already said, the appropriate selection of materials is not always easy. Sometimes, no matter how much time you put into the task, no matter how many people you talk with, you just can't seem to locate a material to teach a specific skill. For those times when you have no idea of what it is you should try to use, we offer the following list of published materials in the areas of:

Preacademic and readiness skills;
Language and communications;
Motor skills;
Reading;
Phonics;
Math;
Handwriting; and
Spelling.

PREACADEMIC/READINESS MATERIALS

PREREADING SKILLS PROGRAM (PRS)

Suggested Use: Preschool, grade 1

Description: PRS is designed to teach kindergarten children five basic skills necessary for learning to read:

1. Attending to letter order.
2. Attending to letter orientation.
3. Attending to word detail.
4. Sound matching.
5. Sound blending.

The program has a diagnostic test for each skill and it can be used in a group or be individualized. It has been criticized for not having the children learn the alphabet before learning the sounds of the letters and the beginning letter of the name of some of the pictures does not always correspond to the sound for the pictures.

Cost: $445

Address: Encyclopaedia Britannica
Educational Corp.
425 No. Michigan Avenue
Chicago, IL 60611

GOLDMAN-LYNCH SOUNDS AND SYMBOLS DEVELOPMENT KIT

Suggested Use: Preschool, grade 1

Description: The program of activities and materials is designed to encourage speech and to learn the symbols of the letter sounds. Objectives are not always stated in a behavioral manner. Program is not individualized. While the program is attractively packaged, it is bulky and hard to handle.

Cost: $148

Address: American Guidance Service
Publisher's Building
Circle Pines, MN 55014

READY-GO-ALPHABET

Suggested Use: Preschool, grade 1

Description: The program consists of 26 individualized self-directing lessons with a pre-test and post-test. Packaging is not very durable.

Cost: $64.90

Address: Educational Activities
P.O. Box 392
Freeport, NY 11520

SULLIVAN READINESS PROGRAM

Suggested Use: Preschool, grade 1

Description: The Sullivan reading readiness course consists of two levels of materials.

Level I teaches the names and shapes of the letters and Level II teaches the sounds of the letters and basic decoding. The program is developed for group teaching, objectives are not stated behaviorally, and there is no pre-test or post-test.

LANGUAGE

GOAL: LANGUAGE DEVELOPMENT

Suggested Use: Primary

Description: Goal was designed to help children develop language processing skills. It includes social skills, creative, problem-solving abilities and motor skills presented in a game format.

Cost: $145

Address: Western Psychological Services
12031 Wilshire Boulevard
Los Angeles, CA 90025

PEABODY LANGUAGE DEVELOPMENT KIT

Suggested Use: Preschool—grade 3

Description: The four self-contained kits provide a variety of materials to encourage language and intellectual development. The kits are intended to be used as a supplement to the regular language program. The lessons are designed to be presented to a group. There are no behavioral objectives stated for each lesson, only general purposes are used for the program. No pre-tests or post-tests are included.

Cost: No. P 192
No. 1 $74
No. 2 $88
No. 3 $66

Address: American Guidance Service
Publisher's Building
Circle Pines, MN 55014

SOUND/ORDER/SENSE

Suggested Use: K-2

Description: The two year program is designed to help the child develop auditory skills. Self-correcting response books are used to provide feedback. Has no pre-test or objectives for each lesson.

Cost: Level I $36
Level II $36

Address: Follett
1010 W. Washington Boulevard
Chicago, IL 60607

DISTAR LANGUAGE I

Suggested Use: Preschool—grade 3

Description: Distar Language is a carefully programmed and sequenced teaching to specific objectives. The program includes a placement test, tests throughout the program and skill reviews.

Cost: $127

Address: SRA
259 East Erie Street
Chicago, IL 60611

LANGUAGE SKILLS-STEP BY STEP

Suggested Use: 1-6

Description: This kit was designed to help students develop basic language skills. Each kit has ten units of liquid duplicating masters. A pre-test and post-test for each unit is provided.

Cost: Kit A, $59.50
Kit B, $59.50

Address: Continental Press, Inc.
407 S.W. 11th Avenue
Portland, OR 97205

CONCEPTS FOR COMMUNICATION—
Unit I Listening with Understanding
Unit II Concept Building
Unit III Communication

Suggested Use: Elementary

Description: This program was developed to aid students in developing receptive, associative and expressive language skills. It has no stated objectives for each lesson, except in Unit III. There are no pre-tests or post-tests and uses the activity books to provide evaluation.

Cost: Unit I, $43
Unit II, $54
Unit III, $59
or total program, $136

Address: Developmental Learning Materials
7440 Natchez Avenue
Niles, IL 60648

LISTENING SKILL PROGRAM

Suggested Use: Intermediate

Description: The primary purpose is to help students develop language abilities within an environment in which they will be used. The content is appropriate to course work continued in the intermediate curriculum. The program has no pre-tests or post-tests and no objectives are stated for each lesson. It should be more attractively packaged.

Cost: $45

Address: Benefic Press
10300 West Roosevelt Road
Westchester, IL 60153

MASTERING THE SENTENCE IN SEVEN STEPS

Suggested Use: High school

Description: The program was developed for the high school student who has little knowledge of formal grammar. Parts of the sentence are simplified to seven inter-related steps using an easy-to-understand vocabulary.

Cost: Simple $1.98
Mast. $2.49

MOTOR

BEGINNING TO LEARN: FINE MOTOR SKILLS

Suggested Use: Preschool, kindergarten

Description: The program helps develop proficiency in fine motor skills. An emphasis is on finger speed, arm and hand precision, arm steadiness, and hand and finger dexterity. Although the materials and sequence of the program are good, it should be broken down into small steps.

Cost: $72

Address: SRA
259 East Erie St.
Chicago, IL 60611

CHEVES PROGRAM

Suggested Use: Kindergarten, primary

Description: This is a visual-motor program developed to cover many skills. It can be used as a complete program or as individual units. Some of the materials included: Fruit and animal puzzles, large and small form puzzles and color geometric shapes.

Cost: $78

Address: Teaching Resources
100 Boylston St.
Boston, MA 02116

ERIE PROGRAM

Suggested Use: Primary

Description: The "Erie Program" is a series of perceptual motor

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exercises in a game-like format. Visual motor templates are included.

Cost: $79

Address: Teaching Resources
110 Boylston St.
Boston, MA 02116

EYE-HAND INTEGRATION EXERCISES

Suggested Use: Preschool

Description: Students follow the lines in paths of increasing difficulty. Then trace design of different shapes.

Cost: $7.25

Address: DLM
7440 Natchez Ave.
Niles, IL 60648

Other fine motor materials developed by DLM are as follows

MULTIVARIANT SEQUENCING BEADS

Suggested Use: Preschool

Description: The beads can be used in an individualized eye-hand coordination training program.

Cost: $8.50

LACING BOARDS

Suggested Use: Preschool

Description: Lacing around the edge of the boards helps develop eye-hand coordination.

Cost: $4.50

STENCILS

Suggested Use: Preschool

Description: There are stencils of various kinds such as clear stencils, animals, farm and transportation and seasonal. The stencils can be used to develop fine motor skills by tracing around the stencil, cutting it out and coloring it.

Cost: $4.25

Gross Motor Materials Disseminated by DLM

DYNA-BALANCE WALKING BOARD

Suggested Use: Preschool, grades 1 and 2

Description: The proper foot placement is necessary to achieve coordination. The child can move either frontwards or backwards on the board. There is a center rail in the middle of the board for more difficult practice in balancing.

Cost:

BEAN BAGS

Suggested Use: Preschool, grades 1 and 2

Description: Bean bags can be used for throwing, catching or balanced on parts of the body for practice in coordination.

Cost: $4.60

TOSS AND TOTAL

Suggested Use: Kindergarten—grade 3

Description: Three velcro-covered balls are used to throw at a velcro-covered board which has several scoring areas. This can be used as both a math game or eye-hand integration exercise.

Cost: $9.50

I CAN

Suggested Use: Primary, TMR

Description: Two of the kits out of the "I Can" program which could be used for development of gross motor skills are fundamental skills and body management. The learning of fundamental skills is basic to mastering all other motor skills. This program is designed for individual instruction.

Cost: Fundamental skills $120
Body management $95

Address: Hubbard
P.O. Box 104
Northbrook, IL 60062

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DRESSING FRAMES

Suggested Use: Preschool—primary

Description: Designed by Montessori to help the child learn how to dress himself, buttoning, zipping, hook and eye, and buckling.

Cost: $5 per frame

Address: Dick Blick Company
P.O. Box 1267
Galesburg, IL 61401

READING

EDMARK READING PROGRAM

Suggested Use: Primary

Description: The "Edmark Reading Program" is a sight reading program. It is developed in a systematic manner using very small steps. The pre-reading set will determine whether a student has the prerequisites to learn from the program. The only criticism of the program has been the costs.

Cost: $396

Address: Edmark Association
13249 Northup Way
Bellevue, WA 98005

CLASSROOM READING DIAGNOSTIC SYSTEM

Suggested Use: Primary

Description: The system covers three areas: word attack, comprehension, and study skills. It provides activities, testing, measurements, worksheets and learning station examples for each skill area.

Cost: $35.85

Address: Mafex
90 Cherry St.
Box 519
Johnstown, PA 15907

VENTURE BOOKS

Suggested Use: Primary

Description: Materials are presented in four levels of difficulty in grade levels 1 and 2. Activities are suggested at the completion of each book.

Cost: $64

Address: Garrard
Champaign, IL 61820

DISTAR READING I, II, III

Suggested Use: Primary grades

Description: Distar reading provides basic reading instruction through a highly structural approach. Distar Reading I deals with sound-symbol indentification, left to right sequencing and oral blending. Reading II stresses comprehension and advanced reading skills. Reading III is designed to teach children how to deal with factual information.

Cost: Reading I, $125.33
Reading II, $132.67
Reading Ili, $106.67

Address: SRA
259 East Erie St.
Chicago, IL 60611

+4 Reading Boosters

Suggested Use: Intermediate

Description: The program is designed for children in the intermediate grades that read below the 4th grade level. The reading

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skills that are stressed are sound-symbol relationships, and comprehension. There is a recordkeeping process provided for each child.

Cost: $349.62

Address: McGraw-Hill
8171 Redwood Highway
Novato, CA 94947

AUDIO READING PROGRESS LAB

Suggested Use: Kindergarten--grade 6

Description: This is a multimedia developmental reading program designed to provide individual instruction in word analysis and comprehension skills. The lessons are correlated to the skills found in most basal readers. Each lesson introduces a specific skill, also has a mastery test.

Cost: Primary k-3, $628.50
Inter. Lab., $338.50
1 grade level, $160

Address: Educational Progress
P.O. Box 45663
Tulsa, OK 74104

BREAKING THE CODE

Suggested Use: Intermediate

Description: The program is for intermediate students that have not learned to read. Decoding and encoding skills are stressed. Its three parts are phonics, oral reading and discussion, and composition. It is not individualized.

Cost: $11.94 per pupil
$91.76 per class

Address: Open Court
Box 599
La Salle, IL 61301

CRACKING THE CODE

Suggested Use: Intermediate

Description: This is a supplementary decoding program for students in the intermediate grades. It does not have specific objectives.

Cost: Order separate component. $12.11 per pupil

Address: SRA
259 East Erie St.
Chicago, IL 60611

READING FOR UNDERSTANDING

Suggested Use: 3-8

Description: The student can use this kit to improve his/her reading comprehension, to learn to analyze ideas and to draw logical conclusions. It has a placement test, then the student progresses at his/her own rate.

Cost: $85.34

Address: SRA
259 East Erie St.
Chicago, IL 60611

CORRECTIVE READING PROGRAM

Suggested Use: 4-12

Description: This program is carefully programmed and uses reinforcement techniques. The program stresses decoding. Materials include a placement test.

Cost: $40.15

Address: SRA
259 East Erie St.
Chicago, IL 60611

READING LABORATORY KITS

Suggested Use: A kit for different levels grade 1 to adult.

Description: Using skill-building materials for individualized reading instruction, the students progress at their own rate.

Cost: $146.60 per kit

Address: SRA
259 East Erie St.
Chicago, IL 60611

HIGH INTEREST—LOW VOCABULARY

ADVENTURE IN SPACE

Suggested Use: Intermediate

Description: These stories of space travel and exploration are placed at grades 2.5 through 3.5. There are three books in each series. There is no teacher's manual, vocabulary, or exercises for the stories.

Cost: $1 per book

Address: Fearon
6 Davis Dr.
Belmont, CA 94002

PACEMAKER CLASSICS

Suggested Use: Intermediate, junior high

Description: These paperbacks are abridged classics written on a low reading level—2.1 to 2.8. Teaching suggestions are included.

Cost: $18.56 set

Address: Fearon
6 Davis Dr.
Belmont, CA 94002

PACEMAKER STORY BOOKS

Suggested Use: Intermediate, junior high

Description: Mystery stories, written for the slow reader. They are written on a second grade level. Teachers' manuals are included.

Cost: $37.44 for series

Address: Fearon
6 Davis Dr.
Belmont, CA 94002

PACEMAKER TRUE ADVENTURES

Suggested Use: Intermediate, junior high

Description: True stories written about students, taking place in historical events, where they would meet famous people.

Cost: $14.25

Address: Fearon
6 Davis Dr.
Belmont, CA 94002

VENTURE SERIES

Suggested Use: Junior high, high school

Description: Sports is the main theme for these well illustrated titles. The reading level is grades 4 to 6.5.

Cost: $27.90 set of 1 each

Address: Follett
1010 W. Washington Blvd.
Chicago, IL 60607

THE CHECKERED FLAG SERIES

Suggested Use: 6-12

Description: The series includes stories about sports cars, motorcycles, and road rallies. Reading level is 2.4 to 4.5. Teacher's manual included.

Cost: $3 per book

Address: Addison Wesley
2725 Sand Hill Road
Menlo Park, CA 94025

KING COMICS READING LIBRARY

Suggested Use: Intermediate, junior high

Description: The vocabulary and sentence construction of the comics have been edited to maintain interest at a low reading level.

Cost: Approximately $27

Address: King Features
Ed. Division
235 E. 45th St.
N.Y., NY 10017

RELUCTANT READER LIBRARY

Suggested Use: Suggested age level junior high

Description: The paperbacks in the series have an appealing format. Teacher's guide for each story is included. Some of the books in the series do not seem appropriate for the designated grade level.

Cost: $29.90

Address: Junior Library
Senior Library
Scholastic
904 Sylvan Ave.
Englewood Cliffs, NJ 07632

TURNING POINT

Suggested Use: Junior and senior high

Description: This title is a collection of short biographies of well known contemporary individuals.

Cost: $3.15 per book

Address: Globe Books
175 5th Ave.
N.Y., NY 10010

READING GAMES

THINK LAB

Suggested Use: Grade 4—adult

Description: This kit of puzzles and games develops reading skills such as finding the main idea and comprehension.

Cost: $66

Address: SRA
259 East Erie St.
Chicago, IL 60611

Other Reading Games—See Phonics Games

READING WORKBOOKS AND DITTOS

READING—STEP BY STEP

Suggested Use: Primary—intermediate

Description: Phonics are especially emphasized with this reading program. Each kit contains ten units, each unit consists of three levels and one pre-test. Kit A—Primary; Kit B—Intermediate.

Cost: $59.50 per kit

Address: Continental Press
407 S. W. 11th Ave.
Portland, OR 97205

BASAL READING SERIES

THE BASIC READING SERIES

Suggested Use: Kindergarten—grade 2

Description: The primary goal of this series is to teach encoding by focusing on word patterns. There is a placement and a mastery test for each level. Handwriting materials are also included.

Cost: $94.28

Address: SRA
259 East Erie St.
Chicago, IL 60611

THE COMPREHENSIVE READING SERIES

Suggested Use: Grades 3-6

Description: The SRA series for the intermediate grades stresses building vocabulary, and acquainting the student with a wide range of different kinds of literature. Mastery tests are included.

Cost:

Address: SRA
259 East Erie St.
Chicago, IL 60611

KEYS TO READING

Suggested Use: Kindergarten—junior high

Description: The program uses a meaning-discrimination approach. The student has meaningful reading such as using the language-experience and story charts and reads for meaning. He/she is also taught basic discrimination skills such as symbol-sound relationships, word analysis skills and comprehension. The lessons are designed for small groups or individualized instruction. Pre-tests and post-tests are included.

Cost:

Address: Economy Co.
P.O. Box 25308
1901 N. Walnut
Oklahoma City, OK 73125

BASIC READING

Suggested Use: Grades 1-6

Description: The "Basic Reading" program uses a combination linguistic and phonic system. Workbooks, filmstrips and duplicating masters are included in the program. Codebooks are also included to give the student more practice in a given area. Writing from dictation and creative writing are encouraged. Some of the pictures in the primary workbooks are too advanced.

Cost:

Address: J. B. Lippincott Co.
Educational Publishing Co.
East Washington Sq.
Philadelphia, PA 19105

READING 720

Suggested Use: Kindergarten—grade 8

Description: The Ginn reading program, "Reading 720," provides development in seven skill areas: decoding, comprehension, vocabulary, study skills, creativity, language, and literature. It includes materials for the slow student as well as the above average. A training program is offered for in-service training. Placement and mastery tests and supplementary materials can be used with the program.

Cost:

Address: Ginn and Co.
1250 Fairwood Ave.
Columbus, OH 43216

SURVIVAL READING

TRAINING FOR INDEPENDENCE—THE RECOGNITION OF FUNCTIONAL WORDS

Suggested Use: EMR, TMR, preschool

Description: The program contains a pre-test followed by a sequenced program with follow-up activities which incorporate the words the student has learned with daily life.

Cost: $8

Address: Developmental Learning Materials
7440 Natchez
Niles, IL 60648

COMMUNITY SIGN READING

Suggested Use: EMR, TMR

Description: This program includes fifty words an individual may find in his/her environment.

Cost: $19.95

Address: Edmark Associates
13249 Northup Way
Bellevue, WA 98005

PHONICS

KITS:

INITIAL CONSONANT CASSETTE/RESPONSE CARD LESSON

Suggested Use: Primary

Description: The lessons provide 18 individualized, self-correcting story lessons to review and reinforce consonant sound.

Cost: $80

Address: Singer/SVE
1345 Diversey Pkwy.
Chicago, IL 60614

VOWEL SOUNDS CASSETTE/RESPONSE CARD LESSONS

Suggested Use: Primary

Description: This series of 20 vowel sounds is to be used for individual review and reinforcement of initial and medial vowel sounds.

Cost: $85

Address: Singer/SVE
1345 Diversey Pkwy.
Chicago, IL 60614

VOWEL-CONSONANT SOUNDS LETTER CARDS

Suggested Use: Primary

Description: These letter cards can be used with groups or individual children, to help teach and review vowel sound/letter correspondences.

Cost: $23

Address: Singer/SVE
1345 Diversey Pkwy.
Chicago, IL 60614

MODIFICATION OF READING BEHAVIOR—A PHONIC PROGRAM UTILIZING RATE ACCELERATION

Suggested Use: Intermediate

Description: The main purpose of this program is to teach encoding skills and to teach the correct sound-symbol relationships. The teacher is encouraged to use behavior modification with this program.

Cost: $32.50 for 5 students

Address: Edmark Associates
13249 Northup Way
Bellevue, WA 98005

CONSONANT SOUNDS

Suggested Use: Primary

Description: The student listens to a cassette tape of words containing the sound the lesson is teaching. Using the wheel cards, the pupil sees the letter in the context of words. A response sheet is included. Mafex also disseminates VOWEL SOUNDS.

Cost: $65

Address: Milton Bradley or Mafex
90 Cherry Street
Johnstown, PA 15902

SOUND/SYMBOL PARENT TEACHING PACKET

Suggested Use: Elementary

Description: This self-contained packet is to be used to help teach letter sounds to children of elementary age, who do not know them. It is to be used on an individual basis.

Cost: $3.25

Address: Instructional Technology Project
Utah State University
Exceptional Child Center UMC 68
Logan, UT 84322

VOCABULARY BUILDING PARENT TEACHING PACKAGE

Suggested Use: Grades 5-12

Description: This package is designed to assist in teaching oral reading fluency, word recognition and word meaning skills for children who can read at the 4th grade level or higher. It is also for use with an individual child.

Cost: $1

Address: Instructional Technology Project
Utah State University
Exceptional Child Center UMC 68
Logan, UT 84322

PHONICS BUILDING GAMES

INITIAL CONSONANT MINI PRINTS

Suggested Use: Primary

Description: The set contains photographs of objects that may be used for teaching, review, and reinforcement.

Cost: $36

Address: Singer/SVE
1345 Diversey Pkwy.
Chicago, IL 60614

VOWEL SOUNDS MINI PRINTS

Suggested Use: Primary

Description: The set contains 90 single-concept photographs of objects whose names contain the short and long vowel sounds.

Cost: $36

Address: Singer/SVE
1345 Diversey Pkwy.
Chicago, IL 60614

CONSONANT JUMBLE FLOOR GAME

Suggested Use: Primary

Description: The game provides practice in visually matching capital and lower case consonants. Singer/SVE also publishes "Medial Vowel Sounds Floor Game" and the "Initial Vowel Sounds Floor Game."

Cost: $16

Address: Singer/SVE
1345 Diversey Pkwy.
Chicago, IL 60614

CONSONANT RACE BOARD GAME

Suggested Use: Primary

Description: The players match playing cards with pictured objects and corresponding consonants.

Cost: $14

Address: Singer/SVE
1345 Diversey Pkwy.
Chicago, IL 60614

INITIAL CONSONANT LOTTO CARDS

Suggested Use: Primary

Description: Lotto cards and mini-prints may be matched picture to word, word to picture, word to word.

Cost: $13

Address: Singer/SVE
1345 Diversey Pkwy.
Chicago, IL 60614

PHONICS WE USE LEARNING GAMES

Suggested Use: Primary

Description: The kit consists of ten separate games designed to supplement primary phonics and reading instruction.

Cost: $87

Address: Rand McNally
School Department Box 7600
Chicago, IL 60680

PHONIC RUMMY

Suggested Use: Preschool-primary

Description: A phonetic game of matching vowel sounds is useful in developing a basic foundation for learning to read.

Cost: $1.65

Address: Kenworthy Ed. Service Inc.
138 Allen Street
Buffalo, NY 14205

GROUP WORD-MATCHING GAME

Suggested Use: Primary

Description: Designed to aid in the recognition of 220 basic sight words from the Dolch list.

Cost: $3.12

Address: Garrad Publishing Co.
Champaign, IL 61820

PHONICS WORKBOOKS AND DITTOS

PHONICS SKILLS KIT—AIMS

Suggested Use: Primary

Description: The student matches cards with pictures and letters. Not enough practice is given for each letter.

Cost: $59.50

Address: Continental Press Inc.
407 W. E. 11th Ave.
Portland, OR 97205

PHONICS BUILDING SERIES

PATTERNS, SOUNDS AND MEANINGS

Suggested Use: Elementary

Description: The program deals with word-analysis skills such as the following: phonic-analysis, structured analysis, syllabication, vocabulary development and dictionary skills. A diagnostic check is given at the beginning of each unit and a mastery test at the end. Work tapes can be purchased for each text.

Cost: $1.68 per book

Address: Allyn and Bacon
470 Atlantic Ave.
Boston, MA 02210

THE SOUND AND STRUCTURE OF WORDS—MERRILL PHONICS SKILL TEXT

Suggested Use: Grades 1-6

Description: The lessons in the skill tests include the following areas: listening, understanding, working with sounds, working with words and reviewing. Skill tapes are available for each lesson. There is too much material on a page, looks cluttered.

Cost: $1.80 per book; skill tapes $375

Address: Charles E. Merrill
1300 Alum Creek Dr.
Columbus, OH 43216

A FIRST COURSE IN PHONICS READING

Suggested Use: Grades 2-3

Description: With this program the letter and phonogram are learned separately and then blended into words. The following skills are included: groups of sounds, nonphonetic words, words with silent letters, syllabication, homonyms and basic spelling rules.

Cost: $1.30 per text

Address: Educators Pub. Service, Inc.
75 Moulton Street
Cambridge, MA 02138

READING SKILLS—A PHONICS APPROACH

Suggested Use: Kindergarten—grade 3

Description: The following skills are included in the "Reading Skills" program: phoneme-visual relationships, structural analysis, sight-word recognition, use of context clues, and grammatical structure. Objectives are given for each lesson. There is too much on a page.

Cost:

Address: McGraw-Hill Book Co.
8171 Redwood Highway
Novato, CA 94947

MATH

MATH WORKBOOKS AND DITTOS

ARITHMETIC STEP BY STEP

Suggested Use: Kit A—primary; Kit B—intermediate.

Description: Using this program the student works on developing his/her knowledge of basic skills. The lessons are organized into small steps with a review and practice.

Cost: $59.50 per kit

Address: Continental Press
407 W. E. 11th Ave.
Portland, OR 97205

PACEMAKER ARITHMETIC PROGRAM

Suggested Use: Primary

Description: There are six levels to this basic program, which is organized in sequential steps. There are no placement tests or mastery tests except in the last level.

Cost: $52

Address: Fearon Publishers
6 Davis Dr.
Belmont, CA 94002

BASIC PRACTICE IN ADDITION AND SUBTRACTION

Suggested Use: Elementary

Description: This book includes placement tests, self tests, practice pages and mastery tests for the pupil.

Cost: $3.75

Address: Love Publishing Co.
6635 E. Villanova Place
Denver, CO 80222

INDIVIDUALIZED ARITHMETIC SKILLS DEVELOPMENT

Suggested Use: Primary

Description: This book contains 40 duplicating masters, which deal with measurement, geometric shapes, line arithmetic and number sequences.

Cost: $7.50

Address: Love Publishing Co.
6635 E. Villanova Place
Denver, CO 80222

BASIC MATHEMATICS

Suggested Use: Junior high

Description: "Basic Mathematics" offers practice in computational skills in a cartoon format on duplicating masters.

Cost: $79

Address: Charles E. Merrill
1300 Alum Creek Dr.
Columbus, OH 43216

MATH KITS

STRUCTURAL ARITHMETIC

Suggested Use: Kindergarten—grade 3

Description: Using manipulatives the student can learn by experimenting with numbers, and from there progress to more abstract concepts and number relationships.

Cost: Kindergarten—$86.67; primary $57.24

Address: Houghton Mifflin
777 California Ave.
Palo Alto, CA 94304

DISTAR ARITHMETIC

Suggested Use: Kindergarten—grade 3

Description: The program is designed to teach students strategies for analyzing and solving problems in basic arithmetic. Placement tests and mastery tests are included.

Cost: $166.67

Address: SRA
259 East Erie St.
Chicago, IL 60611

MOVING UP IN TIME

Suggested Use: Grades 1-4

Description: Short individual lessons are presented sequentially on attractive 8″ × 5″ cards. The kit can be used as a supplement to the regular math program. It has no placement or mastery test.

Cost: $21

Address: DLM
7440 Natchez Ave.
Niles, IL 60648

INDIVIDUALIZED MATHEMATICS: DRILL AND PRACTICE KIT

Suggested Use: Intermediate

Description: The kit is to be used on an individual basis to teach fundamental skills. The lessons are divided into different levels of difficulty, thus each student can go at his/her own rate.

Cost: $87

Address: Random House
400 Hahn Road
Westminster, MD 21157

COMPUTATIONAL SKILLS DEVELOPMENT KIT

Suggested Use: Grade 6—adult

Description: After using the survey test the teacher can determine what weaknesses and strengths each pupil has. The survey test then directs the teacher to the diagnostic test which will indicate which exercise cards are needed to remediate the problem areas. Contents are: addition, subtraction, multiplication, division of whole numbers, fractions, decimals and percents.

Cost: $144.67

Address: SRA
259 East Erie St.
Chicago, IL 60611

I CAN ARITHMETIC

Suggested Use: Primary

Description: The system is for the student that has had no math background. The program moves through small sequential steps to re-grouping two-place subtraction. A recordkeeping chart is included to chart each student's progress.

Cost: $38.50

Address: Bernie Straub Pub. Co.
5435 Union Bay Place N.E.
Seattle, WA 98105

ARITHMETIC FACT KIT

Suggested Use: Grade 3—adult

Description: This is an individualized self-checking program. It includes diagnostic tests, mastery tests and self help cards for the student who is having difficulty doing the lesson. A fact pacer is used to increase the student's speed and accuracy.

Cost: $110

Address: SRA
259 East Erie St.
Chicago, IL 60611

GAMES

MATHFACT GAMES—ADDITION AND SUBTRACTION

MATHFACT GAMES—MULTIPLICATION AND DIVISION

Suggested Use: Elementary

Description: The games provide drill with basic math skills. There are 5 game levels per kit.

Cost: Add.-Sub., $20
Mult.-Div., $22

Address: Milton Bradley Education Product
Random House
400 Hahan Dr.
Westminster, MD

SAY-IT ADDITION

SAY-IT SUBTRACTION

SAY-IT MULTIPLICATION

SAY-IT DIVISION

Suggested Use: Elementary

Description: The games are used for drill of math combinations. The child who finds the combination on his playing card, says it. By saying, hearing and seeing the combination, the child is learning them. The student does not need to know the combinations to win. Poor choice of colors for the materials.

Cost: $3.28 per box

Address: Garrard Publishing Co.
Champaign, IL 61820

FACTOR GAME

Suggested Use: Intermediate

Description: Two different games can be played on the "Factor Game" board. It can be used as a practice of multiplication facts for the student just learning his combinations or it can be used for the pupil that knows his facts for review. Directions are quite complicated.

Cost: $13

Address: Singer/SVE
1345 Diversey Pkwy.
Chicago, IL 60614

MATH SERIES

SCHOOL MATH

Suggested Use: Kindergarten—grade 8

Description: This math series can be used for the slow student with poor reading skills to the above average one. Different activities are suggested for each lesson, extension activities are included along with duplicating patterns. The metric system is used throughout the series.

Cost:

Address: Lyons and Carnaham
School Department
Rand McNally and Co.
Box 7600
Chicago, IL 60680

INVESTIGATING SCHOOL MATHEMATICS

Suggested Use: Kindergarten—grade 8

Description: The use of manipulation is suggested to help develop the skills and concepts in this series. The lessons can be adapted to use with a total classroom or individualized.

Cost: Text, $3.88
Teacher's Ed., $10
Workbook, $1.64
Dittos, $28.64

Address: Addison-Wesley Publishing
2724 Sand Hill Road
Menlo Park, CA 60680

MATHEMATICS FOR INDIVIDUAL ACHIEVEMENT

Suggested Use: Kindergarten—grade 8

Description: This series has special instructions for the different kinds of classroom organizations one might have: for large groups, small groups, individualized or using the laboratory approach. In the upper levels the series has been divided into 5 separate units. The metric system is introduced at each level.

Cost: Text, $4.68
Teacher's Ed., $14.82
Workbook, $1.98
Duplicating Masters, $13.44

Address: Houghton-Mifflin
777 California Ave.
Palo Alto, CA 94304

MATHEMATICS AROUND US: SKILL AND APPLICATIONS

Suggested Use: Kindergarten—grade 6

Description: One can individualize this basic concept series, by using the block and level tests as pre-tests and post-tests. Units on metrics are included. There are several pieces of optional materials: practice and activities workbooks, a test booklet, high and low achiever material in the form of duplicating master. The pages are attractive and uncluttered.

Cost: Text, $3.45
Teacher's Ed., $7.44

Address: Scott Foresman and Co.
855 California Ave.
Palo Alto, CA 94304

MATH/PRACTICAL

ARITHMETIC THAT WE NEED

Suggested Use: Junior high, high school

Description: A book of practical arithmetic which includes measuring, money, time, shapes, percents, temperature, roman numerals and deductions. Needs more practice with each concept before introduction to the next one.

Cost: $1.75 text, $2.50 teacher's key

Address: Frank E. Richards Pub. Co.
330 First St.
Box 370
Liverpool, NY 13088

TIME

Suggested Use: Remedial intermediate

Description: Basic information in time concepts. Includes the face of a clock, telling and writing time, clocks with roman numerals, and writing a date.

Cost: $1.75

Address: Frank E. Richards Pub. Co.
330 First St.
Box 370
Liverpool, NY 13088

MOVING UP IN TIME

Suggested Use: Grades 2-4

Description: The kit is divided into two sections, Part I—special times—birthdays, and holidays, days of the week, months of the year. Part II—telling time. Each lesson is short and attractively presented on a 8″ × 5″ plastic coated card. Record cards are included so that each student can keep track of his/her progress.

Cost: $22

Address: DLM
7440 Natchez Ave.
Niles, IL 60648

TIME TELLING

Suggested Use: Primary—adult

Description: Small sequential steps are used to teach time. Very little reading ability is necessary to follow the directions. Pre-tests and post-tests and recordkeeping sheets are included.

Cost: $3.50

Address: Instructional Technology Project
Exceptional Child Center UMC 68
Utah State University
Logan, UT

IT'S ABOUT TIME

Suggested Use: Primary

Description: This program can be used to teach how to read the face of a clock, to say and write the time correctly.

Cost: $34.50

Address: Edmark Associates
13241 Northup Way
Bellevue, WA 98005

TELLING TIME

Suggested Use: Remedial

Description: The program is divided into 10 units. Each unit is divided into lessons with an objective, pre-test and a specific criteria. Some of the materials covered are as follows: learning numerals, positioning the numerals, long and short hands, directionality, telling time by the hour, and reading of minutes by position.

Cost: $43

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Address: Hubbard
Box 104
Northbrook, IL 60062

MONEY—Training for Independence—A Program for Teaching the Identification of Coins

Suggested Use: Remedial

Description: The program is a practical approach to teaching the identification of coins. A pre-check for readiness is included.

Cost: $4.50

Address: DLM
7440 Natchez Ave.
Niles, IL 60648

MONEY PUZZLES

Suggested Use: Primary

Description: There are 24 double-sided puzzles, matching the word or amount to pictures of coins. Only the correct pair fit, teacher's guide included.

Cost: $5.95

Address: Teaching Resources
100 Boylston Street
Boston, MA 02116

MONEY BINGO

Suggested Use: Primary

Description: There are four levels of difficulty. Teaching skills in naming coins, values, singly and in combination with other coins.

Cost: $10.95

Address: Teaching Resources
100 Boylston Street
Boston, MA 02116

MOVING UP IN MONEY

Suggested Use: Primary or remedial

Description: The kit will provide practice in learning to identify

U.S. coins and bills, learning the equivalence of coin and bill combinations, and counting sets.

Cost: $23

Address: DLM
7440 Natchez Ave.
Niles, IL 60648

USING DOLLARS AND SENSE

Suggested Use: Remedial intermediate and junior high

Description: The book introduces counting money, making change and how to add, subtract, multiply and divide money.

Cost: $3 per book

Address: Fearon
6 Davis Dr.
Belmont, CA 94002

MEASUREMENT—LEARNING ABOUT MEASUREMENT

Suggested Use: Remedial—junior high

Description: The program introduces in a simplified manner various kinds of measurement. The pages are uncluttered and easy to read, there should be more practice with one concept before going on to the next.

Cost: $1.75 per book

Address: Frank E. Richards Pub. Co.
330 First St.
Box 370
Liverpool, NY 13088

MEASURE UP

Suggested Use: Remedial intermediate—high school

Description: The title provides practice in learning about linear measurement and the use of the ruler. The student learns how to measure in feet, inches, and fractions of an inch.

Cost:

Address: Fearon
6 Davis Dr.
Belmont, CA 94002

HANDWRITING

DUBNOFF SCHOOL PROGRAM—LEVELS 1, 2, 3

Suggested Use: Kindergarten—grade 1

Description: The three levels of this prewriting program are in small sequential steps. The program is designed to help improve the child's visual motor, fine motor control and develop the habit of visual orientation.

Cost: $17.95 per level

Address: Teaching Resources
100 Boylston Street
Boston, MA 02116

MANUSCRIPT HANDWRITING

Suggested Use: Primary

Description: The kit contains information on the proper position, essentials of correct handwriting techniques, such as letter formation, size, spacing and alignment.

Cost: $24.50

Address: Continental Press, Inc.
407 W. E. 11th Ave.
Portland, OR 97205

LEARNING ABOUT HANDWRITING

Suggested Use: Primary, remedial

Description: The book has simplified directions and format. The company also publishes "Learning About Writing" for the intermediate grades.

Cost: $1.75 per book

Address: Frank E. Richards Pub. Co.
330 First Street
Box 370
Liverpool, NY 13088

CURSIVE HANDWRITING DEVELOPMENT—DUBNOFF SCHOOL PROGRAM 3

Suggested Use: Grades 2 and 3; remedial intermediate

Description: The individualized program provides for a complete writing program which can be used either developmentally or as a diagnostic tool. It is appropriate for any age or grade level which needs the skills.

Cost: $19.95

Address: Teaching Resources
100 Boylston Street
Boston, MA 02116

CURSIVE HANDWRITING KIT

Suggested Use: Grade 4 and up

Description: This kit contains spirit masters for practice with small and capital letters and numerals with attention to difficult connectives and similar letter formation.

Cost: $24.50

Address: Continental Press
407 S. W. 11th Ave.
Portland, OR 97205

SPELLING

MORPHOGRAPHIC SPELLING

Suggested Use: Grade 4—high school

Description: "Morphographic Spelling" is a highly structured program, it is for the student who has mastered basic sound-symbol relationships but has difficulty spelling. The program tries to provide the student with a set of rules to work from and when and how to apply the rules.

Cost: Approximately $40

Address: E. B. Press
805 Lincoln Street
P. O. Box 10459
Eugene, OR 97401

CONTINUOUS PROGRESS IN SPELLING

Suggested Use: Grade 2—adult

Description: After the student has completed the placement test, he/she is placed in an appropriate level, the pupils are then grouped in pairs to give each other daily partner tests. At regular intervals a delayed recall test is given to measure mastery of the child's spelling skills. If he/she shows he has mastered the skills he will be advanced to the next level. One day a week is set aside for instruction or playing spelling games. The program has a primary and intermediate kit.

Cost: $190

Address: Economy Co.
1901 N. Walnut
P.O. Box 25308
Oklahoma City, OK 73125

SURVIVAL SPELLING—ADD-A-WORD SPELLING PROGRAM

Suggested Use: Grade 2—adult

Description: This program is for the student that needs to improve his/her spelling and can communicate by writing. The student works on an individual basis, practicing and acquiring new words at his/her own rate.

Cost: Cost of production and postage (approximately $2.50)

Address: Working Paper Series
ADD-A-WORD SPELLING PROGRAM
Experimental Education Unit WJ-10
University of Washington
Seattle, WA 98125

PUBLISHERS OF EDUCATIONAL MATERIALS

On the next several pages please find, in alphabetical order, the names and addresses of a number of educational publishing houses.

We have listed these resources in the hopes that contact with them will enable you to find the exact materials you need to teach specific skills. Additionally, contact with publishers ensures that you are aware of the most recently produced methods, strategies and materials.

While you may not need to select materials at this moment, familiarity with the breadth and scope of publishers will probably assist you in the future.

a

Abingdom Press
201 Eighth Ave. S.
Nashville, TN 37202

Abrahams Magazine Service
56th E. 13 St.
New York, NY 10003

Academic Achievement Centers, Inc.
3849 W. Devon Ave.
Chicago, IL 60645

Academic Paperbacks
The Academic Bldg.
Saw Mill Rd.
West Haven, CT 06516

Academic Therapy Publications
1539 Fourth St.
San Rafael, CA 94901

ACI Films
35 W. 45 St.
New York, NY 10036

Acoustifone Corp.
8954 Comanche Ave.
Chatsworth, CA 91311

Adapt Press
104 E. 20th Street
Sioux Falls, SD 57105

Addison-Wesley Publishing Co., Inc.
Reading, MA 01867

Addisonian Press and Young Scott Books
Reading, MA 01867

**DEAF/
HEARING IMPAIRED**

Alexander Graham Bell Association
For the Deaf
Vota Bureau
3417 Volta Place, N.W.
Washington, DC 20007

American Association for Higher Education
Dupont Circle Suite 780
Washington, DC 20036

American Book Co.
450 E. Huron St.
Chicago, IL 60611

American Education Publications
Education Center
Columbus, OH 43216

FILMS

American Educational Film
132 Lasky Drive
Beverly Hills, CA
American Guidance Service, Inc.
Publisher's Bldg.
Circle Pines, MN 55014

The American Jewish Committee
Institute of Human Relations
165 E. 56 St.
New York, NY 10022

American Library Association
Field Enterprises Education Corp.
Merchandise Mart Plaza
Chicago, IL

American Paperback Services
507 Jackson
Topeka, KS 66603

A.M.S. Press, Inc.
56 E. 13th St.
New York NY 10003

Ann Arbor Publishers, Inc.
606 Church St., Box 1446
Ann Arbor, MI 48104

Appleton-Century-Crofts, Inc.
Educational Division Meredith Corp.
440 Park Ave. S.
New York, NY 10016

Armbrust Educational Publication
3163 Leavenworth
Omaha, NB 68105

Arno Press
330 Madison
New York, NY 10017

Ashley Books Inc.
Box 768
Port Washington, NY 11050

Associated Publishers
1538 9th St., N.W.
Washington, DC 20001

Association for Childhood Education International
3615 Wisconsin Ave. N.W.
Washington, DC 20016

Association for Supervision and Curriculum Development
Room 428, 1201 Sixteenth St., N.W.
Washington, DC 20036

Association Instructional Materials
600 Madison Ave.
New York, NY 10022

Atheneum Publishers
122 E. 42nd St.
New York, NY 10017

Audio Dynamic Research
1219 E. 11th St.
Pueblo, CO 81001

Avon Books
959 Eighth Ave.
New York, NY 10019

b

The Baker & Taylor Co.
Gladiola Ave.
Momence, IL 60954

Baldridge Reading Instructional Material
14 Grigg St.
Greenwich, CT 06830

Bantam Books
666 Fifth Ave.
New York, NY 10019

Barnell Loft, Ltd.
958 Church St.
Baldwin, NY 11510

Barnes & Noble, Inc.
International Textbook Series
105 Fifth Ave.
New York, NY 10003

Clarence L. Barnhart, Inc.
Box 250
Bronxville, NY 10708

Beacon Enterprises
609 River St.
Box 1296
Santa Cruz, CA 95060

Beckly-Candy Co.
1900 N. Narragansett Ave.
Chicago, IL 60639

Behavioral Publication, Inc.
2852 Broadway-Morningside Heights
New York, NY 10025

Behavioral Research Laboratories, Inc.
3250 Alpine Rd.
Box 577
Palo Alto, CA 94302

Bell & Howell Co.
Audio Visual Products Division
7100 McCormic Rd.
Chicago, IL 60645

Biological Sciences Curriculum Study
P.O. Box 930
Boulder, CO 80302

Benzinger Bruce & Glencoe, Inc.
8701 Wilshire Blvd.
Beverly Hills, CA 90211

Bobbs-Merrill Co.
4300 W. 62nd St.
Indianapolis, IN 46268

Book-Lab, Inc.
1449 37th St.
Brooklyn, NY 12218

Books On Exhibit
Mount Kisco, NY 10549

Borg-Warner Educational Systems
7450 N. Natchez Ave.
Niles, IL 60648

R.R. Bowker Co.
1180 Ave. of the Americas
New York, NY 10036

Bowmar Publishing Corp.
622 Rodier Dr.
Glendale, CA 91201

Burgess Publishing Co.
426 Sixth St.,
Minneapolis, MN 55415

Burson Products
P.O. Box 9231
Austin TX 78757

C

Cal Press Inc.
76 Madison Ave.
New York, NY 10016

Calif. Assoc. for Neurologically
Handicapped Children
Literature Distribution Center
P.O. Box 790
Lomita, CA 90717

California Test Bureau/McGraw-Hill
Del Monte Research Park
Monterey, CA 93940

Cambridge Book Co.
488 Madison Ave.
New York, NY 10022

Cassettes Unlimited
Roanoke, TX 76262

CASSETTES

Center for Applied Research in Education
521 5th Ave.
New York, NY 10017

Century Consultants
6363 Broadway
Chicago, IL 60625

Charles E. Merrill Publishing Co.
1300 Alum Creek Dr.
Columbus, OH 43216

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Child Study
Association of America
9 E. 89th St.
New York, NY 10028

Children's Press
1224 W. Van Buren St.
Chicago, IL 60607

Citation Press
50 W. 44th ST.
New York, NY 10036

College Skills Center
101 W. 31st St.
New York, NY 10001

Colonial Films, Inc.
752 Spring St., N.W.
Atlanta, GA 30308

The Combined Book Exhibit Inc.
Scarborough Park, Albany Post Rd.
Briarcliff Manor, NY 10510

Commucad-The Communication Academy
Box 541
Wilton, CT 07897

F.E. Compton Co.
425 N. Michigan Ave.
Chicago, IL 60611

Continental Press
520 E. Bainbridge St.
Elizabethtown, PA 17022

Cooperative Tests and Service
Educational Testing Service
Box 999
Princeton, NJ 08540

Coronet Instructional Media
65 E. S. Water St.
Chicago, IL 60639

Coward-McMann, Inc.
200 Madison Ave.
New York, NY 10016

Creative Visuals
Box 1911
Big Springs, TX 97920

Croft Educational Services, Inc.
100 Garfield Ave.
New London, CT 06320

Thomas Y. Crowell Co.
666 Fifth Ave.
New York, NY 10019

Crown Publishers
419 Park Ave. S.
New York, NY 10016

CTB/McGraw Hill
Del Monte Research Park
Monterey, CA 93400

Curriculum Associates
P.O. Box 56
Wellesley Hill, MA 02181

Curriculum of Texas Inc.
900 Old Koeing Lane
Suite 129
Austin, TX 78756

d

John Day Co.
257 Park Ave. S.
New York, NY 10010

Dell Publishing Co., Inc.
750 Third Ave.
New York, NY 10017

Department of Health Education and Welfare
U.S. Government Printing Office
Washington, DC 20402

Developmental Reading Distributors
1944 Sheridan Ave.
Laramie, WY 82070

The Dial Press/Delacorte Press
750 3rd Ave.
New York, NY 10017

A.B. Dick Co.
5700 W. Touchy Ave.
Chicago, IL 60645

Dodd, Mead & Co., Inc.
79 Madison Ave.
New York, NY 10016

Doubleday and Co., Inc.
501 Franklin Ave.
Garden City, NY 10017

Dreier Educational Systems
320 Raritan Ave.
Highland Park, NJ 08904

Dutton, E.P. and Co.
201 Park Ave. S.
New York, NY 10002

e

Early Years Magazine
P.O. Box 1223
Darien, CT 06820

The Economy Company
P.O. Box 25308
Oklahoma City, OK 73125

Edmark Associates
655 I. Orcas St.
Seattle, WA 98108

Educational Corporation of America
984 Livernois Rd.
Troy, MI 48084

Educational Activities, Inc.
P.O. Box 392
Freeport, NY 11510

Educational Aids
845 Wisteria Dr.
Fremont, CA 94538

Educational Book Division
Prentice Hall
Englewood Cliffs, NJ 07632

Educational Development Corp.
Post Office Drawer 1007
Lakeland, FL 33802

Educational Developmental Laboratories, Inc.
A Division of McGraw Hill
Huntington, NY 11743

Educational Games, Inc.
P.O. Box 3653
Grand Central Station
New York, NY 10017

GAMES

Educational Progress
Division of Educational Development Corp.
P.O. Box 45663
Tulsa, OK 74145

Educational Projections Corp.
3070 Lake Terrace
Glenview, IL 60025

Educational Publications
Dublin, NH 03444

Educational Resource Bureau
21 Audubon Ave.
New York, NY 10032

Educational Testing Service, Inc.
1947 Center St.
Berkeley, CA 94704

Educators Publishing Service
75 Moulton St.
Cambridge, MA 02138

Eric/Crier Clearinghouse
NCTE
1111 Kenyon Rd.
Urbana, IL 61801

CLEARING HOUSE

f

Fawcett Publ., Inc.
1515 Broadway
New York, NY 10036

Fearon Publishers, Inc.
6 Davis Dr.
Belmont, CA 94002

Fideler Co.
31 Ottowa Ave. N.W.
Grand Rapids, MI 49502

Follett Education Corp.
1010 W. Washington Blvd.
Chicago, IL 60607

Fonetik Books
19 Garfield
Palm Springs, CA 92262

Free Press
866 Third Ave.
New York, NY 10023

g

Gage Educational Publications
164 Commander Blvd.
Agincourt, Ontario, Canada

Gamco Industries
Box 1911
Big Springs, TX 79720

Garrard Publishing Co.
2 Overhill Rd.
Scarsdale, NY 10583

General Electric Co.
Corporate Research & Development No. 4-343
Schenectady, NY 12345

General Learning Corp.
3 D. 54th St.
New York, NY 10022

Gillingham-Slingerland
Reading Workshops
75 Moulton St.
Cambridge, MA 02138

Ginn and Co.
9888 Monroe Dr.
Dallas, TX 75229

Globe Book Co., Inc.
175 Fifth Ave.
New York, NY 10010

Goodyear Pub. Co.
15115 Sunset Blvd.
Pacific Palisades, CA 90272

The Grade Teacher
Riverside, NJ 08075

Grolier Educational Corp.
845 Third Ave.
New York, NY 10022

Grossett and Dunlap
51 Madison Ave.
New York, NY 10010

Grove Press
80 University Place
New York, NY 10010

h

E. M. Hale & Co.
1201 S. Hastings Way
Eau Claire, WI 54701

Harcourt Brace Jovanovich
757 Third Ave.
New York, NY 10016

Harper and Row Publishers
Library Dept.
10 E. 53 St.
New York, NY 10022

Harper, Torchbooks
10 E. 53 St.
New York, NY 10022

Harvard University Press
79 Garden St.
Cambridge, MA 02138

Harvey House, Inc.
Irvington-on-Hudson
New York, NY 10533

Hawthorn Books
260 Madison Ave.
New York, NY 10016

Hayden Book Co., Inc.
50 Essex St.
Rochelle, Park, NJ 07662

Hayes School Publ. Co.
321 Pennwood Ave.
Wilkinsburg, PA 15221

D. C. Heath and Co.
125 Spring St.
Lexington, MA 02173

Hertzberg New Method
Vadalia Rd.
Jacksonville, IL 62650

Highlights for Children
2300 Fifth Ave.
Columbus, OH 43216

Hoffman Information Systems
5623 Peck Rd.
Arcadia, CA 91006

Holiday House
18 E. 56th St.
New York, NY 10022

Holt, Rinehard and Winston
383 Madison Ave.
New York, NY 10016

Horn Book Co.
585 Boylston St.
Boston, MA 92116

Houghton Mifflin Co.
110 Tremont St.
Boston, MA 02107

i

Iansford Publishing Co.
P.O. Box 8711
San Jose, CA 95155

Ideal School Supply Co.
11000 S. Lavergne Ave.
Oak Lawn, IL 60453

Illinois Schools Journal
Chicago St. College
6800 S. Steward Ave.
Chicago, IL

Imperial International Learning Corp.
Box 548
Kankakee, IL 60901

Incentive Publications
311 Lynwood Blvd.
Nashville, TN 37205

Independent Learning Systems, Inc.
18 Professional Center Parkway
San Rafael, CA

INDIVIDUALIZED INSTRUCTION

Individualized Instruction, Inc.
P.O. Box 25308
Oklahoma City, OK 73125

Industrial Press Inc.
200 Madison Ave.
New York, NY 10016

Initial Teaching Alphabet Foundation
52 Vanderbilt Ave.
New York, NY 10017

INDIVIDUALIZED INSTRUCTION

Innovations for Individualizing Instruction
Box 4361
Washington, DC

Institute for Social Research
426 Thompson St.
Ann Arbor, MI 48106

Institute of Human Relations
165 E. 56 St.
New York, NY 10022

Instructional Communications Technology
Huntington, NY 11743

Instructo Corp.
Cedar Hollow and Mathews Rds.
Paoli, PA 19301

Instructor Publications
Seven Bank St.
Dansville, NY 14436

International Film Bureau
332 S. Michigan Ave. **FILMS**
Chicago, IL 60604

International Reading Association
800 Barksdale Road **IRA**
Newark, DE 19711

International Universities Press
239 Park Ave. S.
New York, NY 10003

I Red Inc.
205 Penn Lane
West Chester, PA 19380

j

Journal Films
909 W. Diversey Parkway **FILMS**
Chicago, Il 60614

Judy Company **PRACTICAL MATH MATERIALS**
210 N. School St.
Minneapolis, MI 55441

k

Ken-A-Vision Manufacturing Co.
5616 Rayton Rd.
Rayton, MO 64133

Kenworthy Education Service
Box 3031
138 Allen St.
Buffalo, NY 14205

Keystone View Co.
Meadville, PA 16335

Knowledge Aid Division of MJE Corp.
6633 W. Howard St.
Niles, IL 60648

Kraus-Thomson
Organization Limited
Microform Division
Millwood, NY 10546

l

Lansford Publishing Co.
2516 Lansford Ave.
San Jose, CA 95125

Learn, Inc.
21 E. Euclid Ave.
Haddonfield, NJ 08033

Lerner Publications Co.
241 First Ave. N.
Minneapolis, MI 55803

Learning Corp. of America
711 Fifth Ave.
New York, NY 10022

Learning, Education Today Center
530 University Ave.
Palo Alto, CA 94301

Learning Systems
4150 Chippewa St.
St. Louis, MO 63116

Let's Read
Box 250
Bronxville, NY 10708

L.B. Lippincott Co.
E. Washington Square
Philadelphia, PA 19105

Liveright Pub. Corp.
376 Park Ave. S.
New York 16, NY 10016

Love Publishing Co.
6635 E. Villanova Pl.
Denver, CO 80222

Lyons and Carnahan
407 E. 25th St.
Chicago, IL 70716

m

McCormick-Mathers Publishing Co.
450 W. 33rd St.
New York, NY 10001

McCutchan Publishing Corp.
2526 Grove St.
Berkeley, CA 94704

McDougal, Little and Co.
Box 1667
Evanston, IL 60204

David McKay Co., Inc.
750 Third Ave.
New York, NY 10017

McQueen Publishing Co.
R.R. No. 1, Box 198
Tiskilwa, IL 61368

MacMillan Co.
866 Third Ave.
New York, NY 10022

Marfex
Marfex Associates, Inc. Publ.
111 Barron Ave.
Johnstown, PA 15906

Marketing Services Division
The Lehigh Press, Inc.
7001 N. Park Dr.
Pennsauken, NJ 08109

MCM Corp.
P.O. Box 288
Old Greenwich, CT 06870

Media Materials
409 W. Cold Spring Lane
Baltimore, MD 21210

Mediax
21 Charles Street
Westport, CT 07880

Charles E. Merrill Publishing Co.
1300 Alum Creek Dr.
Columbus, OH 43216

Modern Curriculum Press
13900 Prospect Rd.
Cleveland, OH 44136

William Morrow and Co.
Lothrop, Lee and Shepard
105 Madison Ave.
New York, NY 10016

Motivational Learning Programs
1301 Hamilton Ave.
Trenton, NJ 08629

MultiMedia Education, Inc.
11 West 42nd St.
New York, NY 10036

n

National Assessment of Educational Progress
201 A. Huron Towers
2222 Fuller Rd.
Ann Arbor, MI 48105

National Council of Teachers of English
1111 Kenyon Rd.
Urbana, IL 61801

National Education Association
1201 16th St., N.W.
Washington, DC 20036

National Society for Programmed Instruction
Trinity University
715 Stadium Dr.
San Antonio, TX 78212

National Textbook Co.
8259 Niles Center Rd.
Skokie, IL 60076

New American Library Inc.
1301 Ave. of the Americas
New York, NY 10019

New Readers Press
Box 131
Syracuse, NY 13205

New York Public Library
Fifth Ave. and 42nd St.
New York, NY 10018

Noble and Noble Publishers
750 Third Ave.
New York, NY 10016

W. W. Norton & Co., Inc.
55 Fifth Ave.
New York, NY 10003

o

Oddo Publishing
Storybook Acres
Beauregard Blvd.
Fayetteville, GA 30214

Ohio State University Press
2070 Neil Ave.
Columbus, OH 43210

Open Court Publishing Co.
Box 599
La Salle, IL 61301

Orthografik Reform
19 Garfield
Palm Springs, CA 92262

Oxford Book Co.
387 Park Ave. S.
New York, NY 10016

Oxford University Press, Inc.
Business Office and Shipping Dept.
16-00 Pollitt Dr.
Fair Lawn, NJ 07410

p

Pacifica Foundation
Pacifica Tape Library
Department E
5316 Venice Blvd.
Los Angeles, CA 90019

TAPE LIBRARY

A. N. Palmer Co.
1720 W. Irving Park Rd.
Schaumburg, IL 60172

Parents' Magazine Press
8712 Twana Dr.
Garden Grove, CA 92641

F. E. Peacock Publishers, Inc.
401 W. Irving Park Rd.
Itasca, IL 60143

Penguin Books, Inc.
7110 Ambassador Rd.
Baltimore, MD 21207

PERCEPTUAL SKILLS

Perceptual Development
Audio Dynamic Research
1219 E. 11th St.
Pueblo, CO 81001

Pergamon Press, Inc.
College Dept. Maxwell House
Fairview Park
Elsford, NY 10525

Phi Delta Kappan
8th St. & Union Ave.
Bloomington, IN 47401

MULTI-MEDIA PRODUCTS

Phonovisual Products, Inc.
12216 Parklawn Dr.
Rockville, MD 20852

Platt and Munk, Inc.
Division of Child Guidance Prod. Inc.
1055 Bronx River Ave.
Bronx, NY 10472

Plays, Inc. Publishers
8 Arlington St.
Boston, MA 02116

Play 'N Talk "Phonics in Action"
Box 188804
Oklahoma City, OK 73118

Polaski Co.
Box 7466
Philadelphia, PA 19101

Prentice Hall
Educational Book Division
Englewood Cliffs, NJ 07632

Professional Educators Publications, Inc.
P.O. Box 80728
Lincoln, NB 68501

The Psychological Corp.
757 Third Ave.
New York, NY 10016

Psychotechics Inc.
1900 Pickwick Ave.
Glenview, IL 60025

G.P. Putnam's Sons
Coward McCann Inc.
200 Madison Ave.
New York, NY 10016

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Rand, McNally
P.O. Box 7600
Chicago, IL 60680

Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157

Raymer Educational Films, Inc.
14118 Kiamesha Court
Houston, TX 77069

FILMS

Reader's Choice
Division of Scholastic Magazines, Inc.
904 Sylvan Ave.
Englewood Cliffs, NJ 07632

Reader's Digest Services
Educational Division
Pleasantville, NJ 10570

Reading Development Center
400 Estheimer, Suite 208
Houston, TX 77027

Reading Enrichment Program
A Keyboard Publication
1346 Chapel St.
New Haven, CT 06511

Reading Laboratory
55 Day St.
S. Norwalk, CT 06854

Reading Newsreport
11 W. 42nd St.
New York, NY 10026

Responsive Environments Corp.
200 Sylvan Ave.
Englewood Cliffs, NJ 07632

Right To Read
400 Maryland Ave. S.W.
Washington, DC 20202

Rinehart and Co.
232 Madison Ave.
New York, NY 10016

Ronald Press Co.
79 Madison Ave.
New York, NY 10016

S

Sage Pub., Inc.
275 S. Beverly Dr.
Beverly Hills, CA 90212

W.B. Saunders Co.
West Washington Square
Philadelphia, PA 19105

Schloat Productions
A Prentice-Hall Co.
150 White Plains Rd.
Tarrytown, NY 10591

Scholastic Book Series
Scholastic Magazine
904 Sylvan Ave.
Englewood, NJ 07632

Science Research Assoc., Inc.
259 Fifth Ave.
New York, NY 10016

Charles Scribner's Sons
597 Fifth Ave.
New York, NY 10017

Seabury Press
815 Second Ave.
New York, NY 10016

Sigma Information, Inc.
240 Grand Ave.
Leonia, NJ 07065

Simon and Schuster
630 Fifth Ave.
New York 20, NY 10020

Singer Co./Graflex Division
3750 Monroe Ave.
Rochester, NY 14603

Singer Education & Training Products
SVE-Society for Visual Education, Inc.
1345 Diversey Parkway
Chicago, Il 60614

VISUAL EDUCATION

Skill Development Equip. Co.
Division of Port-a-Pit, Inc.
1340 N. Jefferson
Anaheim, CA 92806

Slosson Educational Publications
140 Pine St.
East Aurora, NY 14052

Society for Visual Education, Inc.
1345 Diversey Parkway
Chicago, IL 60614

Sound Education, Inc.
P.O. Box 10245
Palo Alto, CA 94303

Stanford University Press
Stanford, CA 94305

Sunburst
Pound Ridge
New York, NY 10576

Superintendent of Documents
Gov't Printing Office
Washington, DC 20402

Syracuse University Press
Box 8, University Station
Syracuse, NY 13210

SEVERELY/ PROFOUNDLY HANDICAPPED

t

Taylor Associates
Instructional/Communications
Technology, Inc.
Huntington, NY 11743

Teacher
866 Third Ave.
New York, NY 10022

Teachers College Press
1234 Amsterdam Ave.
New York, NY 10027

Teachers Exchange of San Francisco
600 35 Ave. at Plaza
San Francisco, CA 94121

Teaching Resources Corporation
100 Boylston St.
Boston, MA 021116

Teaching Technology Corp.
Box 3278
North Hollywood, CA 91609

Technical Educational Services, Inc.
P.O. Box 9231
Austin, TX 78766

Texas Education Service Center
11th & Brazos Sts.
Austin, TX 78711

Charles C. Thomas
Publisher
301-327 E. Lawrence Ave.
Springfield, IL 62704

Thorndike Barnhard
by Scott Foresman & Co.
1900 E. Lake Ave.
Glenview, IL 60025

Time-Life Books
Time and Life Building
Rockefeller Center
New York, NY 10020

Toronto Public Library
40th St. Clair Ave. E.
Toronto 290, Ontario

TRI
Educational Center
2797 S. 450 W.
Bountiful, UT 84010

True Sally
College of Education
University of S. Florida, FL

U

United Transparencies
Box 688
Binghamton, NY 13902

TRANSPARENCIES

University Associates
P.O. Box 615
Iowa City, IA 52240

University of Chicago Press
5801 & South Ellis Ave.
Chicago, IL 60637

University of Michigan Press
615 E. University
Ann Arbor, MI 48101

University Park Press
Chamber of Commerce Building
Baltimore, MD 21202

SEVERELY/ PROFOUNDLY HANDICAPPED

V

Visual Materials Inc.
Redwood City, CA 94061

W

Wadsworth Publishing Co., Inc.
Ten Davis Dr.
Belmont, CA 94002

Walker Educational Book Corp.
720 Fifth Ave.
New York, NY 10019

Franklin Watts, Inc.
845 Third Ave.
New York, NY 10023

Webster Publishing Co.
1154 Reco Ave.
St. Louis, MS 63126

Weekly Reader
American Education Publications
Education Center
Columbus, OH 43216

Western Psychological Services
12031 Wilshire Blvd.
Los Angeles, CA 90025

Western Publishing Co., Inc.
150 Parish Dr.
Wayne, NJ 07470

Westinghouse Learning Corp.
2680 Hanover St.
P.O. Box 10680
Palo Alto, CA 94304

Albert Whitman and Company
560 W. Lake St.
Chicago, IL 60606

John Wiley & Sons, Inc.
605 Third Ave.
New York, NY 10016

H.W. Wilson Co.
950 University Ave.
Bronx, NY 10452

Winston Press
25 Groveland Terrace
Minneapolis, MN 55403

Word Games
P.O. Box 305
Healdburg, CA 95448

World Book
Division of Field Enterprises
510 Merchandise Mart Plaza
Chicago, IL 60654

World Traveler (The)
1537 Thirty-Fifth St. N.W.
Washington, DC 20007

x

Xerox Education Publications
1250 Fairwood Ave.
Columbus, OH 43216

y

Young Readers Press
Box 181
Northvale, NJ 07646

PART TWO/ MODIFICATION

Obviously, you're not always going to be able to find the materials you need just as you would like them. Or, be able to pay for the one which is "just what you need." Given that this is a state common to all, knowing how to modify materials for use is important. Briefly, there are several ways to modify materials. These are listed below and discussed in more detail on the following pages:

1. Selective use of a given material.
2. Alteration of student response.
3. Alteration of the frequency of student response.
4. Alteration of the type and frequency of corrective and informational feedback.
5. The addition of stimuli cues (modeling, shaping).
6. The deletion of stimuli cues.
7. Alteration of task time allotment.
8. Reorganization of material by format or system alterations.
9. The coordinated use of a material with other materials and/or methods.

1. *Selective use of a given material.*

Contrary to what we might like to happen, not all materials are good for all students nor is every material totally useful in its entirety. Many, many instructional materials have sections (pages or chapters) which are outstanding on specific points and weak on others. It is up to you to determine which portions of a material are helpful to you and your students. By coding portions or pages of specific materials for use with certain skills and/or with specific students, you can maximize the use of an otherwise mediocre material.

Again, you can be selective in your use of a given material by:

- Using it with only certain kinds of learners; or
- Using selective portions of a material to teach specific skills.

2. *Alterations of student responses.*

Materials can be vastly improved by both simple and more complex alterations of student responses. Because many materials ask that students respond in a manner totally foreign to the school or home environment, it is often wise to change what a student does in response to a material stimulus. Simple changes in student response include:

- Asking the student to say a letter or read a word instead of drawing a circle around a picture;
- Asking the student to copy the letter instead of tracing an outline;
- Asking the student to set the table instead of placing play silverware on a game board;
- Asking a student to button his own coat instead of telling you how it's done.

Simple alterations of student responses will come quickly to you if you simply identify what the student is expected to do in the natural environment. Or, if you think about the actual, functional outcome of teaching the student "this particular skill." Whenever possible, try to have the student respond in the manner which is most close to the response he or she will be expected to make in the natural environment.

More complex alterations of student response include:

- Asking the student to respond on an answer or cue sheet you have designed;
- Asking the student to respond orally with the "checking assistance" of a peer or aide;
- Asking the student to draw lines to the correct answers instead of circling the error;

- Asking the student to correct intentionally printed errors as well as identifying the error.

Obviously, even more complex alterations of student responses are necessary when a student is visually impaired, hearing impaired or physically impaired. With such students it is often important to solicit the help of an aide, student teacher or older student in modifying the response patterns or sheets available in many materials.

3. *Alteration of the frequency of student response.*

A very simple and most effective method of modifying a material to increase its usability is to simply increase or decrease the number of times a student must respond to a given problem, page or item. Because many materials fall weak in the area of "adequate practice or drill opportunities" this alteration can make many materials go a long way.

Student frequency of response can be increased or decreased by:

- Asking the student to do only row one problems, but to do the row twice instead of once (you'll need to provide an answer sheet other than the one provided in the book or on the ditto, etc.);
- Asking the student to write each spelling word three times before they do the exercises provided in the book;
- Asking the student to say "hello" to two other students as well as to yourself;
- Asking the student to do only every other problem on the page; or
- Asking the student to pick his or her five "most favorite" sentences to diagram, words to read, etc.

Again, with a little imagination, you'll be able to increase material usability by increasing or decreasing the number of times a student responds to the material presented.

4. *Alteration of the type and frequency of corrective and informational feedback.*

As students learn a new skill they need frequent checks or moments of confirmation. When you tell a student that she or he completed a task correctly or answered all ten comprehension questions with 90 percent accuracy, you are providing the learner *informational feedback*. You are letting him know how well he did. Frequent feedback to students tends to help students know exactly what you want and subsequently it results in more consistent correct performance.

When you provide students *corrective feedback* you tell the student what he did wrong *along with providing him the correct answer or method for obtaining the correct answer.* Ensuring that the materials you use contain both informational and corrective feedback is critical. And since most materials rarely provide both, it is up to you to revise the material so that it does.

Without knowing it, you probably already provide informational feedback. Every time you enter a grade on a paper, put a star at the top of the workbook page or smile at one of your students after they feed themselves without your help, you let your students know they've done a good job. These informal feedback practices are enhanced by making them specific. For example:

- Don't just tell Sue she did a good job on filling out the job application form. Tell her she has really mastered entering the information correctly and concisely. And that you especially appreciate—or are pleased with—the correct spelling.
- Don't wait until a student turns in a workbook page or ditto to comment on the problem they did correctly (as opposed to the four they did incorrectly). Walk by their desk during the time allotted the task and tell them how well they did on problem number three. Not only will this increase the amount of informational feedback you're able to provide your students, it will also help you locate students who are practicing errors, something you don't want.

Other less orthodox methods of providing informational feedback are to signal students when they comply with a classroom rule or elicit an appropriate behavior which you haven't seen since September 7, 1952. Informal cues, of which you need to inform your students, include:

- Winking;
- Touching the side of your head;
- Touching the flower on your desk;
- Placing a piece of chalk on the student's desk; and
- Dropping a piece of colored paper or a chip on the corner of the student's desk.

Many of these practices take a split second to execute, are noiseless and increase desired performance many times.

Some of the materials you will find will include extra practice sheets. These sheets can be converted with very little effort and can be used to help students correct their errors. But remember, before students can correct their work, especially in the early or acquisition stages of learning, it is imperative that you tell them the correct answer or how to obtain the correct answer. Remember:

> Students, generally, do not make mistakes because they want to make mistakes.
>
> Students make mistakes because they do not know how to make the correct response or how to make it quickly. In either case, you need to teach the student how to make the correct response, or how to make the correct response in a limited amount of time.

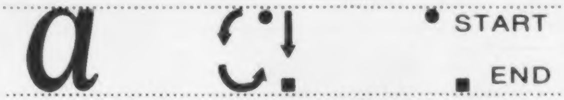
By making corrective feedback practice sessions a part of your school day and incorporated into your materials, students will soon learn that it is no great evil to make an error; that errors occur when there is lack of information. And that in this classroom, the key is to obtain the correct information.

5. *The addition of stimuli cues.*

While all materials profess to contain enough information so that you can teach and students can learn new skills, some materials are actually too broad or too narrow to get a specific piece of information across. For example, a handwriting book may instruct a student to copy the letter at the top of the page. While that cue may be appropriate for some students, by-and-large, it is inappropriate for many learners in the acquisition stage of writing. Most new "writers" benefit a great deal by writing over the letter first (tracing it) and then by making the letter with cues such as dotted lines which gradually fade away.

When your students seem not to be able to obtain a piece of information from a workbook page or ditto, it may very well be that they lack enough stimuli cues. Examples of teacher-added cues include:

- Adding start and stopping points for letters.



- Giving students cued drill sheets for math facts.

1	2	3	1
+2	+1	+1	+3
3	3	4	4
1	1	3	2
+3	+2	+1	+1

Cued drill sheets are especially effective for increasing fluency or proficiency (doing something quickly as well as accurately).

- Giving assistance to students—

  Total physical assist (you actually "walk" or "take" the student through the entire skill i.e., put on shirt);

  Partial physical assist (you help the student through difficult or troubling spots);

  Prompts (you touch an arm to remind the student to put his arm through the sleeve as the next step);

  Verbal cues (you simply remind the student of the next step).

6. *The deletion of stimuli cues.*

For every up there is a down. And for every not enough there's a "too much." Fortunately, deleting stimuli cues is not a task teachers of exceptional students have to engage in very much. But on a few occasions it is appropriate to do so. Delete stimuli cues which:

- Are not clear;
- Do not serve a particular interest of yours or your student;
- Are too repetitive and tend to waste time;
- Are inaccurate; or
- Are useful, but not at this particular time or for this particular skill or for this particular student.

Deleting is fairly easy. You simply cut out what you do not want. Put an "X" through the line, the problem or the list. Or have your students make puzzles out of bad or useless cues.

7. *Alteration of task time allotment.*

Materials can be vastly improved by adding time allotment notes at the top right hand corner of work sheets. This "note" should indicate to the student about how much time you expect the task should take. You can increase the usability of a material by using time cues to build fluency as well as a method of increasing accuracy. Let your students know what you want and when. As the student gets better at the task, decrease the time allotment until your student performs the tasks proficiently as well as accurately.

Today you have ______ minutes to complete this work. You'll have mastered the material when you can complete it accurately in ______ minutes.

Actual time to complete the task: ______.

8. *Reorganization of material.*

Perhaps the most common fault of educational materials is that they present the correct content but not in the order in which we like to teach it. Less often the material is presented in the order in which we would like to teach it, but does not employ our favorite instructional system.

One very effective method of material organization is to review each page in a text or workbook and code it to the sequence step for which it is appropriate. Good. Next, if possible, reorder the pages or, better yet, separate the pages—duplicate them—and put them in your files in the order in which they will be used.

To reorganize content so that it fits into your favorite instructional system simply extract the content. This is very useful in the teaching of spelling, composition, etc. Very often you will find that you can and do come up with better systems for presenting the material than those used by a commercial material.

9. *Coordinate the use of a material with other materials or methods.*

If you've taught for at least one month or more you know that very few materials are totally "self-sufficient." Most of them need your attention in at least little ways. It is important to realize this and to act as if it is part of your planning day. Try to organize materials in the same area of the room which support one another. Put notes on your shelves that will remind you that "this material" is very good with "that material." Or that "such and such a film" will reiterate the facts about walking with crutches that the pamphlet just didn't make. By identifying materials which support one another, you increase the usability of both materials.

SPECIAL INSTRUCTIONS SHEET

Student ....

Date ....

Today

Read ....

Copy ....

Circle ....

Work ....

____ ....

Special instructions:

175

STUDENT WORK SHEET

Student ....

Date ....

Complete problems _____, _____, _____, _____, and ____ on page __ of ________________________________.

When you're finished, correct your work by checking your answers in the ________________________________.

IF you made any mistakes, rework the problem(s) below until your answer matches the correct answer.

PART THREE/ EVALUATION

As scrupulous consumers of materials commercially developed and dispensed, teachers rank low on the scale. All too often teachers are forced to purchase materials from catalogues with no more than a colored picture and a three line descriptor to guide the selection. It's a difficult state of affairs perpetuated by the policies of some educational publishing houses banning free sample materials or regional sales persons.

The task of selecting materials is further complicated by the ever rising cost of each product. As teachers, you can afford to make very few purchasing errors lest you spend your entire allotment on some kit useful only in teaching native Australians (age 17-1/2) how to count to 100 using intervals of 14!

So be it. Given this state you must find ways to protect yourself and your students. The evaluation guidelines for materials on the following pages should help you do just that. Hopefully you will discover that the time involved in reading and applying the guidelines will be worthwhile; that meticulous selection of materials reaps benefits many times over.

Best of luck.

Many professionals contributed to the development of evaluation guidelines. However, the recent work of Anita Archer of the University of Oregon has contributed significantly to this section and she is acknowledged for her work with appreciation.

GENERAL GUIDELINES FOR THE EVALUATION OF INSTRUCTIONAL MATERIALS

Entry Skills

	Yes	Some	No
Are the entry behaviors demanded by the material easy to locate and understand?	☐	☐	☐
Can your students make the type of responses required by the material?	☐	☐	☐
Does the material provide a method of initial placement?	☐	☐	☐

Content

Does the content reflect general knowledge and research in the specific area?	☐	☐	☐
Is the information current?	☐	☐	☐
Are facts stated accurately?	☐	☐	☐
Does the material stress facts that you think are important or are important to people in your community?	☐	☐	☐
Does the material present realistic practice opportunities?	☐	☐	☐
Does the material contain sufficient drill and practice?	☐	☐	☐
Are opportunities to make error responses minimized?	☐	☐	☐

Sequence

	Yes	Some	No
Is the sequence evident in the material?	☐	☐	☐
Does the sequence progress from simple to complex information or from beginning to end?	☐	☐	☐
Does the sequence progress in a logical order?	☐	☐	☐
Is the sequence similar to the one you would choose or the one selected for use in your school?	☐	☐	☐
Are the sizes of the sequence steps appropriate for your learners?	☐	☐	☐
Is the sequence amenable to minor adjustments?	☐	☐	☐

Objectives

Does the material list objectives either in the teacher's manual or in a special supplement?	☐	☐	☐
Are students told what skill they are working on or towards?	☐	☐	☐
Is a criteria set for mastery of each objective?	☐	☐	☐
Is the criteria appropriate?	☐	☐	☐

Daily or On-Going Monitoring of Performance

Can the skills presented be monitored with any continuity?	☐	☐	☐
Can students tell if they are improving on skills from one day to the next?	☐	☐	☐
Is a daily, weekly or periodic monitoring system provided in the material?	☐	☐	☐
If charts are provided to record performance, can they be understood by students without excess explanations?	☐	☐	☐

Feedback

Does the material contain a feedback system to students which is teacher independent?	☐	☐	☐
Is the feedback present frequently?	☐	☐	☐
Does the feedback allow the student opportunities to correct error responses?	☐	☐	☐
Is positive feedback provided for correct responses?	☐	☐	☐

Adaptability

	Yes	Some	No
Can the learner make a teacher-independent response (can the student work alone)?	☐	☐	☐
Can the material be used with one child as well as with small group instruction?	☐	☐	☐
Is the reading level of the directions such that a student could use the material with very little support?	☐	☐	☐
Does the material provide periodic review pages so that mastery and retention can be checked?	☐	☐	☐
Does the response of the student leave a "permanent record" so that you can check performance?	☐	☐	☐

Material Appearance/Organization

	Yes	Some	No
Is the material attractive?	☐	☐	☐
Is the binding and paper of good quality?	☐	☐	☐
Is the type size suitable to the age of your students?	☐	☐	☐
Is the material organized so that only one skill is presented per page?	☐	☐	☐
Do illustrations enhance the material?	☐	☐	☐
Are pages clearly numbered so that you can instruct students to the appropriate page with little or no difficulty?	☐	☐	☐

Information to the Instructor

	Yes	Some	No
Are instructions on how to use the material presented clearly?	☐	☐	☐
Are correction sheets organized so that they can be easily retrieved?	☐	☐	☐
Are practice and review pages specified?	☐	☐	☐
Does the material include a warranty?	☐	☐	☐
Does the material require minimal training?	☐	☐	☐
Can the material be easily used by an aide or peer tutor?	☐	☐	☐
Is the material affordable?	☐	☐	☐
Can the material be reused?	☐	☐	☐

EVALUATION OF BASAL SERIES FOR USE IN SPECIAL EDUCATION

Diagnosis and Evaluation

	Yes	Some	No
Does the series include an Informal Reading Inventory (IRA) or a placement test?	☐	☐	☐
Does the series include evaluation procedures for comprehension and vocabulary following units or books?	☐	☐	☐
Can you adapt material so that you can monitor performance on a daily or weekly basis?	☐	☐	☐

Content

Does the basal include a variety of materials (fiction, non-fiction, poetry)?	☐	☐	☐
Does the basal carefully control the gradual introduction of vocabulary—particularly at lower levels?	☐	☐	☐
Does the content of the basal present accurate pic1tures of our world—of the students own environment?	☐	☐	☐
Does the content contain a balance of sex-roles, race representations and socio-economic classes?	☐	☐	☐
Is the material contemporary?	☐	☐	☐
Is the material appealing to your students?	☐	☐	☐
Is adequate practice provided when new skills are presented or when previous skills are reviewed?	☐	☐	☐

Teacher's Manual

	Yes	Some	No
Does the manual include exercises to introduce new vocabulary?	☐	☐	☐
Does the manual include "guided reading" procedures?	☐	☐	☐
Does the manual indicate that there is a balance of oral and silent reading drills or practice sessions?	☐	☐	☐
Does the manual include oral questions to be used as follow-up to silent or oral reading?	☐	☐	☐
Do questions go beyond literal comprehension?	☐	☐	☐
Does the manual suggest supplementary activities?	☐	☐	☐
Are reproductions of student text pages included in the teacher's manual?	☐	☐	☐

Physical Features

Is the book attractive?	☐	☐	☐
Are illustrations attractive and appealing to students?	☐	☐	☐
Do illustrations enhance the basal?	☐	☐	☐
Is the paper of good quality?	☐	☐	☐
Is the type size suitable to the maturity of your students?	☐	☐	☐
Is the binding durable?	☐	☐	☐
Can replacement books be obtained for reasonable cost?	☐	☐	☐

Content of the Workbook

Does the series provide practice exercises in vocabulary and comprehension?	☐	☐	☐
Is the lesson format uncluttered and clear?	☐	☐	☐
Are directions easy to follow and at the same reading level as the book?	☐	☐	☐
Do pages have only one skill per page?	☐	☐	☐
Do comprehension exercises develop skills beyond literal comprehension?	☐	☐	☐

	Yes	Some	No
Can a feedback or correctional procedure be established for the material?	☐	☐	☐
Can progress be recorded if it is monitored daily or nearly daily?	☐	☐	☐
Are progress record sheets included in the student's workbook?	☐	☐	☐
Are provisions made for student self-corrections?	☐	☐	☐

EVALUATION OF PHONIC WORKBOOKS AND DITTOS

	Yes	Some	No
Is a method of placement into the material specified?	☐	☐	☐
Are the lessons logically sequenced?	☐	☐	☐
Is the sequence of skills one which you would like to use?	☐	☐	☐
Are the sequence or lesson steps small?	☐	☐	☐
Is only one skill presented per page?	☐	☐	☐
Can the material be divided so that you could reorganize the lessons if so desired?	☐	☐	☐
Are the directions obvious?	☐	☐	☐
Are the directions written at a level understandable by your students?	☐	☐	☐
Are stimuli clearly presented?	☐	☐	☐
Does the stimuli resemble those most closely related to the actual skill?	☐	☐	☐

	Yes	Some	No
Does the response resemble the response the learner must make in the natural environment?	☐	☐	☐
Are the responses required of the student measurable?	☐	☐	☐
Are the responses independent rather than controlled (avoids multiple choice items)?	☐	☐	☐
Is sufficient practice provided for your students on each skill presented?	☐	☐	☐
Are there opportunities for your students to correct error responses?	☐	☐	☐
Does the material provide any consequences for performing work accurately?	☐	☐	☐
Does the material contain a feedback system?	☐	☐	☐
Does the material lend itself to a student self-correcting system?	☐	☐	☐
Are pages identified as "introducing a new skill," "practice pages," and "review pages"?	☐	☐	☐
Can a student work through the material at his or her own rate?	☐	☐	☐
Can the material be used without constant teacher supervision?	☐	☐	☐
May pages be reproduced in large numbers?	☐	☐	☐

EVALUATION OF HANDWRITING WORKBOOKS AND DITTOS

	Yes	Some	No
Does the material group letters with consistent strokes or starting points?	☐	☐	☐
Does the presentation of new letters progress from easy to more difficult letters?	☐	☐	☐
Does the teaching of individual letters include a progression of steps (i.e., trace, copy, write)?	☐	☐	☐
Is the line size appropriate?	☐	☐	☐
Is the material attractive, durable and uncluttered?	☐	☐	☐
Can the directions be understood by your students?	☐	☐	☐
Is allowance made for left-handed writers?	☐	☐	☐
Is adequate practice provided?	☐	☐	☐
Are the letter models presented in the material legible?	☐	☐	☐
Are the letter models presented efficient to construct?	☐	☐	☐
Are provisions made for giving feedback to the students regarding both correct and error performance?	☐	☐	☐
Does the material suggest intervention strategies for students who are having a difficult time?	☐	☐	☐
Can student performance be monitored from day to day without extensively revising the material?	☐	☐	☐
Does the material include a student record sheet?	☐	☐	☐

EVALUATION OF VOCATIONAL EDUCATION MATERIALS

	Yes	Some	No
Does the material present/teach to a vital living or important job related skill?	☐	☐	☐
Is the skill taught one the student is likely to engage in?	☐	☐	☐
Is the information, procedures, etc. current, updated and accurate?	☐	☐	☐
Does the material actually present "how to" information?	☐	☐	☐
Is the reading level of the material controlled (approximately 4.5 reading level)?	☐	☐	☐
Is the material appealing to older, mature students?	☐	☐	☐
Does the material include a system for monitoring performance from day to day, lesson to lesson?	☐	☐	☐
Does the material state criteria for mastery of specific steps or lessons?	☐	☐	☐
Does the material include a student progress or record sheet?	☐	☐	☐
Does the material include procedures for assessing a student's current level of performance on skills presented?	☐	☐	☐
Does the material suggest support materials and state additional student activities?	☐	☐	☐
Does the material provide or suggest adequate practice?	☐	☐	☐
Is the material non-sexist?	☐	☐	☐

EVALUATION GUIDELINES— INSTRUCTIONAL GAMES

	Yes	Some	No
Does the game facilitate acquisition, fluency building or maintenance of a skill which is important to your students?	☐	☐	☐
Does the skill the game professes to teach actually occur *regularly* in the course of playing the game?	☐	☐	☐
Does the game have a good balance of skill and chance?	☐	☐	☐
Can students play the game with and without your attention?	☐	☐	☐
Can the game be played by more than 1 or 2 students at a time?	☐	☐	☐
Are the game rules and directions simple and easy to follow?	☐	☐	☐
Is the game motivating?	☐	☐	☐
Is the game durable and lasting—are replacement parts easily obtained?	☐	☐	☐
Is the cost of the game reasonable?	☐	☐	☐

Additional Readings

Archer, A. *Instructional Materials for the Mildly Handicapped.* Unpublished manuscripts, 1977.

Becker, W. C., Englemann, S. and Thomas, D. R. *Teaching 2: Cognitive Learning and Instruction.* Chicago: Science Research Associates, 1975.

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Englemann, S. *Preventing Failure in the Primary Grades.* Chicago: Scientific Research Associates, 1969.

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Lowenbraun, S. and Affleck, J. Q. *Teaching Mildly Handicapped Children in Regular Classes.* Columbus, Ohio: Charles E. Merrill Pub. Co., 1976.

Peter L. J. *Competencies for Teaching: Individual Instruction.* Belmont, Calif.: Wadsworth Publ., 1975.

Popham, W. J. and Baker, E. L. *Planning an Instructional Sequence.* Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1970.

CLASSROOM ORGANIZATION AND MANAGEMENT

Module Four of the *Nevada Teachers' Resource Kit* is a product of
the Nevada Department of Education,
Special Education Division.

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PURPOSE

The purpose of Module Four, Classroom Organization and Management, is to provide information which will assist you in establishing, organizing, or re-structuring a classroom.

The recommendations which have been included are designed to make your teaching environment, and your students' learning environments easier to manage. At the same time, a carefully-planned and well-organized environment just may make both teaching and learning more pleasurable.

Toward this end, information has been included on utilizing available space effectively, storing materials in retrievable fashion, scheduling time to maximize instruction, working with ancillary personnel in productive ways, and coordinating resource programs with the rest of the world. A list of related readings and resources has been included for your use in seeking more detailed information on these topics.

ORGANIZATION

This module is organized in three parts. Each contains basic information related to the topic of classroom organization and management, suggests strategies you may want to consider trying, and lists elements you may want to keep in mind as you organize your own classroom.

Part One: Planning for Success.

Part Two: Organizing an Effective and Efficient Classroom:
- Using Available Space Effectively.
- Organizing Materials.
- Setting Up Schedules You Can Live With.
- Working with Paraprofessionals.
- Coordination Strategies.

Part Three: Additional Readings.

PART ONE/PLANNING

Nearly every teacher, at least once during his/her teaching career, has a chance to set up a classroom. That's a bonus that comes with teaching—setting up your own working environment.

As you begin setting up your classroom, you'll want to channel all your extra energy into effectively establishing an environment which will make both your days and your students' days maximally enjoyable.

The following items are provided as an aid in helping you do just that. As you begin establishing your classroom, consider the following:

1. Take Stock:

Assess the situation, and try to determine what resources are available.

Which classroom will you have?

How many students will you be serving?

Will you have an aide/volunteer?

What instructional materials are available?

What equipment and furniture will you have?

Is it possible (and, how possible) to get new or different equipment/materials?

Are resources generally scarce, or readily available?

2. Organize Your Space:

Experiment to find the most functional and flexible arrangement of furniture and equipment within the space that you've been assigned.

What kinds of working spaces will you need?

How can you divide the space effectively?

How can you "use" the furniture to create classroom areas?

3. Organize Instructional Materials and Supplies:
Spend some time arranging and filing materials in a manner which will allow you and your students quick and easy access to needed materials.

Where and how will you store textbooks/workbooks that are in use/not being used?

How will you file worksheets and dittos?

How will you store supplies so students can locate what they need?

4. Schedule Students and Programs:
Establish a schedule which maximizes the instructional time each student receives while in the classroom, at the same time determining when he/she can most afford to be away from the regular classroom.

How many students will you have in the classroom at any one time?

Will students be grouped for instruction?

During which regular classroom activities will resource students be removed?

How long will individual students spend in the resource classroom?

Will you see all students on a daily basis?

How can students best use the time when they are in the resource room?

5. Work With Paraprofessionals:
Make certain your aides/volunteers know what they are responsible for, and have the skills needed to be successful in completing the tasks you assign. This may involve careful planning and training on your part, but is an investment well worth making.

What responsibilities will paraprofessionals have in your classroom?

How will you train them in the skills needed?

What procedures will you use for sharing information/communicating with paraprofessionals?

In what ways can you reinforce the paraprofessionals with whom you work?

6. Coordinate With Others:
Identify those with whom communication is important, and figure

out some procedures which can be used for sharing information about your program on a regular basis.

Which teachers need information about your program, or individual students in your program?

Which administrators need information?

Which specialists will you be working closely with?

How can you most effectively share information with parents?

The following workplan worksheet has been included for your use in planning for, setting up, and maintaining a classroom which is both efficient and effective.

WORKPLAN FOR SETTING UP A CLASSROOM

It may be helpful, as you establish your classroom, to work out a plan for yourself. This workplan has been included to help make your life a little easier during the next few weeks, and as a means of allowing you and your colleagues to see that you are, indeed, making progress.

Major tasks	Outcomes by the time you've completed this step	People to talk with	Target dates, notes
Taking stock	• A room, with furniture, equipment and materials. • Knowledge of how to get new/different equipment and materials. • Information about aides/volunteers for your classroom.		
Organizing your space	• A room in which the furniture and equipment are arranged effectively.		
Organizing instructional materials and supplies	• A system for storing and retrieving instructional materials. • A system for organizing and storing classroom supplies.		
Scheduling students and programs	• A class schedule of events throughout the day, for each day of the week. • An individual daily schedule for each student in the classroom. • A schedule of instructional groups/student programs you and your aide will be conducting. • A classroom schedule of the activities of each regular classroom from which your students come.		
Working with and training paraprofessionals	• A list of the tasks you expect your aide/volunteer(s) to handle. • Procedures for communicating and sharing information. • Strategies for reinforcing your aide/volunteer(s).		
Coordinating with others	• A list of the people who need information about your program, and/or individual students in your program. • Specific strategies (how, and how often) for sharing information with appropriate others. • Strategies for gathering the information you need about other programs.		

PART TWO/ORGANIZING

USING AVAILABLE SPACE EFFECTIVELY

To some extent, you'll probably have to learn to live with things as they are. It's tough to convince others to change the height of the ceiling, the shape of your classroom, the number of windows, outlets, etc.

At the same time, you do have freedom to arrange the furniture and equipment within your space. Think about making the best of a bad situation, or, of transforming your space into a place where you, and your students, like to be.

As you organize the space in your classroom, you may want to think about:

- Making sure you have areas set up for the types of activities you plan to conduct.
- Making certain students and teachers can move freely and easily in and out, and around the classroom.
- Arranging things so the classroom is manageable, both for you and for your students.
- Making the environment attractive and comfortable.

The following specific questions are included as a guide to decision-making, for your use as you consider each of the concerns listed above.

Making sure you have areas set up for the types of activities you plan to conduct:	Are there spaces for small group activities?
	Are there spaces where students can go to work independently?
	Are there spaces for storing instructional materials and supplies?
	Are there spaces for free time areas, or interest centers?
	Are there spaces for audio-visual equipment (tape recorders, language masters, etc.)?
Making certain students and teachers can move freely and easily in and out, and around the classroom:	Is the classroom accessible to students in wheelchairs?
	Is there enough space for unencumbered traffic flow into and out of the classroom?
	Is there adequate space for students and teachers to move from one area to another without bothering others?
Arranging things so the classroom is manageable, both for you and for your students:	Are all areas of the classroom visually accessible, i.e., do dividers separate areas, yet not block vision?
	Are supplies stored in places where students can get needed materials easily?

Are areas designated for storing individual student work packets, for work which needs correcting, etc.?

Is the classroom arranged so that furniture need not be moved during the day?

Making the environment attractive and comfortable:

Have you used colors to help divide space, or to connect one area with another?

Are working areas comfortable, i.e., have they adequate light, comfortable temperature, etc.?

Are there spaces which provide alternative environments, i.e., tables and chairs, rugs and cushions, etc.?

The worksheet on the following page is provided as an aid for your use as you begin organizing the space in your classroom.

STEPS TO SYSTEMATICALLY ORGANIZING SPACE IN YOUR CLASSROOM

______ Visualize the classroom, think about the size and shape of the room, window locations, blackboards, etc.

______ Use the following blueprint workplan to sketch the "givens" within the classroom (doors, windows, blackboards, outlets, ledges, walls or dividers which cannot be moved).

______ On the workplan, list the areas you'd like to structure within the classroom (free time area, small group work area, independent work area, audio-visual equipment work area, etc.).

______ Using a pencil, experiment with arranging the flexible pieces of furniture you have (bookshelves, student desks, tables, file cabinets, etc.) to create the areas you'd like to establish. Keep trying new arrangements until you find one which seems appropriate.

______ Check your arrangement against the considerations listed in the preceding narrative.

______ Make any modifications you feel are needed.

______ Enlist the help of some friends and colleagues (strong ones, if you can find them), and try out the new arrangement.

______ Once you've set up the basic structure of the classroom, work to make the environment attractive and to make your selected arrangement "work" for you by using color to divide, and connect, spaces within the classroom.

FLOORPLAN

Modify the floorplan above to reflect your own classroom.

1. Indicate doors, windows, blackboards, electric outlets, cupboards, sink, toilet, etc.
2. List the work areas you'd like to establish in the classroom (independent work area, free time area, etc.).
3. Add the furniture and equipment you have, including student desks, tables, chairs, bookshelves, file cabinets, etc.
4. Work at rearranging the furniture and equipment you have until you feel comfortable with one particular layout. Then, try it.

ORGANIZING MATERIALS

You may never have noticed that some teachers, when they most need a particular worksheet or workbook, can't seem to put their hands on it—while others seem, day after day, to exist in a world where materials are easily and efficiently retrieved.

The difference? Perhaps a bit of luck, an extra file cabinet, a fragment of free time during the day. Maybe. More likely, though, is the fact that some teachers spend time and energy organizing instructional materials before they teach, restore materials to their proper place as they teach, and can easily retrieve materials after they've taught.

It takes time and energy to organize materials effectively. But, the initial investment may well be worth hours and hours of frustration, wasted time, and delay at some later, and perhaps more crucial, time.

There are several major types of materials you'll need to manage. These include:

Instructional Materials

The materials you use as you work with students, or that students use in working independently; in both cases the materials will be related to some specific content you're teaching.

Supplies

The materials you and your students need in order to function, i.e., pencils, paper, erasers, staplers, scissors, tape, etc.

Day-to-Day Materials

The materials you and your students use daily in completing tasks within the classroom, i.e., individual workpackets, daily assignment sheets, materials which go back to the regular classroom with students, homework materials, etc.

System/Building/Program Materials

The materials you use in initially assessing student performance, determining eligibility, obtaining parent permission for testing and placement, reporting number and names of students served, etc.

Spend a little time organizing these materials. Rumor has it that you'll be easier to live with, your classroom will run more smoothly, and that you'll probably run across some items you thought you'd lost years ago!

ORGANIZING INSTRUCTIONAL MATERIALS

Goal

To set up a system for storing and efficiently retrieving specific instructional materials.

Steps to success

1. Determine the major curriculum areas in which you will be providing instruction (reading, math, spelling, etc.).

2. For each area, list the major skills you expect students to master (see Module Five: Student Goals).

3. Gather, sort, and label by skill the instructional materials you have on hand.

4. Set up a filing system; file and store labeled materials in file cabinets, in boxes, or on marked shelves.

5. Make a master list of the skill areas, and specific skills; list materials you have for each; post the master list.

6. As you acquire new materials, label them by skill, and file or store them accordingly.

Tips on Location

Try to store instructional materials at or near the area(s) in which you will be instructing. Use file cabinets, or labeled bookshelves.

Tips From Veterans

1. Devise a coding system for skills by using abbreviations (MULT 0-6 = multiplication with factors 0-6), or arbitrarily number the skills on your master list, and code materials by number (33 = spelling list of "long a" words).

2. Label one "file copy" of each material; keep it in front, or stapled to the inside of the file folder; never use this copy.

3. Set up a school-wide, central skills file into which all teachers enter worksheets and instructional materials coded to an agreed-upon skills list.

ORGANIZING SUPPLIES

Goal

To establish a system for making needed supplies easily available to students and teachers.

Steps to Success

1. List the supplies which are frequently needed in your classroom; by students and/or by teachers.
2. Select storage spots for each which are easily accessible.
3. Label storage areas with tags listing items stored in each.
4. Determine and announce specific procedures for getting, using, and returning supplies.

Tips on Location

Store extra pencils, paper, etc., near the entrance to the classroom; students can pick up needed supplies as they enter, and return them as they leave. Store teacher-use supplies in a separate place from student-use supplies.

Tips From Veterans

1. Label pencils with either student's name, or your name, to prevent the ever-recurring missing pencil syndrome.
2. Teach students to get, use and return supplies correctly—reinforce those who use your procedures, and provide guided practice for those who haven't yet mastered your system.

ORGANIZING DAY-TO-DAY MATERIALS

Goal

To maximize student management of the classroom.

Steps to Success

1. List the daily activities that involve particular materials, e.g., reading groups, individual student work, daily assessment, taking materials back to the regular classroom, homework, etc.
2. Determine where to store materials used for each of the activities listed; label each storage spot appropriately.
3. Determine and announce procedures for getting, using and returning materials, e.g., who is responsible for getting and returning specific materials, consequences for following or violating procedures, etc.

Tips on Location

These are the materials you use most frequently, so use your best spaces, and most accessible spots for storing them. Try to store materials in places which will prevent students having to get up and walk all the way across the room to get needed materials.

Tips From Veterans

1. Use a record stand, placed near the door for holding individual student folders.
2. Have a box, near the door, into which students can deposit work which needs to be corrected.
3. Store homework materials, or materials to take back to the regular classroom near the door so students can pick them up on their way out.

ORGANIZING SYSTEM/ BUILDING/PROGRAM MATERIALS

Goal

To collect and organize materials and forms used in assessing students, placing students in special programs, and completing program reports.

Steps to Success

1. Gather extra copies of each form you use frequently; label a file folder for each; file accordingly.
2. For each area in which you are involved in initial assessment of student skills, gather the instruments and materials you use (tests, response forms, scoring manuals, observation sheets, checklists, etc.); organize and file them by curriculum area.
3. If you maintain master files or cumulative folders for students, set up one folder for each student, and insert needed or required documents (assessment summaries, parent contact records, health records, etc.).

Tips on Location

Since this material is not material you will be using frequently, store it in a ''marginally accessible'' spot, e.g., bottom file drawer or a box in the closet. Save your best spots for material you use regularly.

Tips From Veterans

1. Make friends with school secretaries; they frequently have a large supply of used file folders which can be had for the asking.

2. Many cardboard boxes are made for file folders; look for one that's a little over 12″ wide, and 6-10″ deep.

3. Structure an opportunity during which you can demonstrate your organizational system in front of your principal or supervisor; they'll be noticeably impressed, and remember your program.

SETTING UP SCHEDULES YOU CAN LIVE WITH

Schedules appear to make or break many a program (and probably many a teacher as well). Establishing schedules which allow the right people to be in the right places, with the right other people, at the right times requires careful preplanning, and just a dash of good luck.

As you arrange schedules for your students, try to structure schedules which:

- Allow adequate time for instruction.
- Provide appropriate teacher-student ratios.
- Build in time for monitoring and assessing changes in student performance.
- Provide variety within each student's school day.
- Provide some free time for each student, every day.
- Vary the structure of scheduled events, including some large-group, small-group, and individual activities.
- Structure activities in a way which allows students to be involved in doing things which are worthwhile, as opposed to busywork activities, for the majority of each school day.

In addition to establishing schedules for students in your program, you'll need to set up schedules for all those involved in teaching. This may involve scheduling activities for yourself, a student teacher, some classroom volunteers or aides, or students

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acting as tutors. As you arrange schedules for instructors, particularly for yourself, try to set up schedules which:

- Include time for team meetings, staffings, or sharing meetings.
- Allocate time for communicating regularly with other teachers and administrators.
- Provide adequate time for daily planning and preparation.
- Reserve periods of time for communicating regularly with parents.
- Set aside time for maintenance of your program, e.g., keeping the classroom and program intact.

Worksheets and schedule forms which might help:

The worksheet on the next page is included as a guide for your use in setting up schedules which you, your fellow teachers, and your students can live with.

Following the worksheet are a number of schedule forms, some of which may be appropriate for use in your program. Please use them, or modify them as needed, and then use them to help you establish and communicate schedules for your program.

WHOLE CLASS DAILY SCHEDULE

Time	Activities/Events*
	*Enter recess, lunch, bus arrival/departure, PE, library, music, art, academics, etc.

TEACHER SCHEDULE

Time	Activities/Tasks				
	Monday	Tuesday	Wednesday	Thursday	Friday

INDIVIDUAL STUDENT SCHEDULES

Times				—Students—						
				—Activities—						

SAMPLE INDIVIDUAL STUDENT SCHEDULES

By time

Date ....

Student ....

Time	Activities/tasks

By activity

Date ....

Student ....

	Activities/tasks	✓
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

WORKING WITH PARAPROFESSIONALS

If you are lucky enough to have an aide or volunteer assigned to your classroom, you'll want to spend some time guaranteeing the success of your mutual venture. Taking time to orient your assistant(s), and to regularly communicate expectations will greatly increase the chances that your work together will be both enjoyable and productive. Three major activities you'll want to complete in establishing good working relations with paraprofessionals are:

- Orientation to the school, the staff, and the program;
- Explanation of tasks you expect him/her to complete;
- Regular and frequent communication and feedback between the two of you.

Orientation to the school, the staff, and the program:

Because aides and volunteers may be new to the school system, as well as to the school, you'll want to spend some time orienting them to policies, procedures, and protocol. It may be helpful to provide:

1. A list of staff members, their classrooms, and teaching assignments.
2. A list of students who will be served in your classroom program.
3. Written information describing, or a thorough verbal explanation of local policies for issues like confidentiality, professional

responsibility, entering/leaving the building during other than regular hours, etc.

4. Written information describing, or a thorough verbal explanation of local school protocol or procedures regarding parking, addressing others (i.e., Mr. vs. Ted), expectations for dress, smoking, etc.

Explanation of tasks you expect him/her to complete:

You'll want to make certain your assistant knows (a) what to do, and (b) how to do it.

One strategy would be to list the tasks you expect the person to accomplish daily and weekly. You may want to use the Paraprofessional Planning Sheet on the following page as a starter for this list.

Then, spend some time reviewing the list with your aide, explaining in detail exactly what you expect.

Although thorough explanations and written notes or lists are helpful, actually demonstrating (modeling) is one of the most effective ways of communicating what it is you'd like to have done. You may find it helpful to "walk through" some of the tasks you've listed with the person responsible for accomplishing them.

Regular and frequent communication and feedback between the two of you:

Establishing a trusting and open relationship with your aide will pave the way for effective communication between the two of you.

Strategies which seem to facilitate good working relationships include:

- Setting aside short periods of time throughout the day (early morning, recess, lunch, immediately after school) to talk through how things are going.
- Frequent and specific feedback on tasks which have been attempted or accomplished.
- Periodic checking on how the aide feels about his/her work in the classroom.
- Plenty of attention, which might be shown through attentive listening, shared experiences outside the classroom (maybe lunch together), special surprises for special occasions (birthdays, anniversaries of starting day, blue Mondays, etc.), and any other activities with which you feel comfortable.

PARAPROFESSIONAL PLANNING SHEET

Tasks which an aide/volunteer might be assigned in a classroom (please add others which seem appropriate to your own situation):

______ Materials work:

- ______ Materials preparation (running dittos, collating booklets, etc.)
- ______ Materials organization (coding, filing, storing materials)
- ______ Correcting papers, tests
- ______

______ Work directly with students:

- ______ Skill work
  - ______ Practice sessions with an individual student
  - ______ Practice sessions with small groups
  - ______ Monitoring of independent work activities
  - ______ Individual assistance to students
  - ______
- ______ Assessment/monitoring activities
  - ______ Conducting assessments
  - ______ Recording assessment results
  - ______ Charting assessment results
  - ______ Making notes to teachers/parents of student performance scores on assessments
  - ______

- ______ Social, non-academic work
  - ______ Monitoring a free time area
  - ______ Supervising recess
  - ______ Being available to play games, talk with students who have earned free time
  - ______ Managing a tcken reinforcement "cash-in" center
  - ______ Conducting small group games, activities
  - ______

- ______ Assistance with self-help tasks
  - ______ Feeding
  - ______ Toileting
  - ______ Dressing/Undressing
  - ______ Transporting (carrying, wheeling, etc.)
  - ______

- ______ Daily program/classroom maintenance tasks
  - ______ Attendance
  - ______ Lunch count and report
  - ______ Bus tickets and bus money
  - ______ Setting up the classroom
  - ______ Cleaning up the classroom
  - ______ Bulletin board/blackboard work
  - ______ Maintaining supplies (reordering, restocking)
  - ______
  - ______

TROUBLESHOOTING

Tactics for Working Through Things When Things Don't Seem to Be Going All That Well

Personal discussion of problems encountered in working with paraprofessionals seems to be one of the most effective ways of turning unsuccessful situations into successful ones.

The following tips are offered as tactics you may want to try in talking through existing problems:

1. Try to talk early, rather than to let a small problem develop into a major disaster (also known as the "nip-it-in-the-bud" strategy).

2. Try to enter the discussion willing to share responsibility for what's happened or not happened, rather than blaming the other person.

3. Try to determine if the problem is most closely related to:

(a) Someone not knowing what to do; in which case, a clarification of expected performance may solve the problem;

(b) Someone not knowing how to do what is expected; in which case a little direct teaching may go a long way;

(c) Someone not wanting to do something, or someone feeling that the task assigned is not worth doing; in which case you've got a motivation problem, and probably need to change the task itself, or change the consequences for doing the task.

4. Try to focus on what can be done rather than what has already occurred; focus on the future, rather than the past (remember, you've still got a chance to set up for success in the future).

5. Try to generate several alternative solutions or next steps, so you'll have the luxury of choosing what appears to be the highest-probability-for-success choice.

6. Once you've decided what to try, set a date for touching base again, to see how things are going. Make certain you stick to it, and do check back again.

COORDINATION STRATEGIES

Although you may be the most skilled special education teacher in the country, without close coordination between your program and others within the school or community, your program will be less effective than it could be. Because the children with whom you are working have special needs, they may be receiving service from a number of different specialists. In order for each professional to maximize the effects of his/her services, frequent interaction, joint planning, and productive teamwork are required.

Not only will close coordination with others provide a basis upon which you can build an effective program for every child with whom you work, close coordination will also provide a basis upon which you and your colleagues can build strong and reciprocal working relationships.

There are a number of people with whom you should communicate information about your program, and your students. Some of the groups with whom it is important to communicate and coordinate are:

Administrators and Program Supervisors

With these people, you'll need to clear procedural items, such as assessment practices, due process procedures, and operational classroom items.

Other Teachers and/or Therapists Who Work With Children in Your Program

This group might include regular classroom teachers, reading or math specialists, speech and language therapists, occupational and/or physical therapists, or adaptive physical education teachers. With this group you'll want to coordinate program objectives, teaching strategies, and assessment procedures.

Parents or Guardians of Students in Your Program and/or the Students Themselves

With this group you'll want to share information on objectives, teaching procedures, and assessment outcomes; particularly in situations where parents are conducting programs at home (for example, toileting, feeding, or academic practice sessions), it is critical that communication occur frequently.

Physicians or Others Involved in Providing Medical Services

In this instance you will want to obtain information on items like drug dosages and administration procedures. In turn, you'll want to share behavioral/performance data which might be used by those involved in prescribing medical interventions.

In order to manage the flow of information from your program to others and at the same time stay on top of information gathering efforts, it will help to plan a communications/coordination system for your program.

Based on the experience of teachers who have demonstrated effective communication skills, the following guidelines for establishing communication, and coordination between your program and others in the school or community are provided.

GUIDELINES FOR COMMUNICATION AND COORDINATION WITH OTHER PROGRAMS

The following guidelines are provided for your use in establishing communication and coordination between your program and others within the school and/or community.

1. Determine communication/coordination needs, i.e., make a list specifying who needs what information, how often;
2. Generate a list of possible procedures which could be used to communicate with each of the individuals/groups you've listed;
3. Meet with each of the people with whom you plan to coordinate; jointly select communication/coordination procedures which seem most appropriate;
4. Determine strategies you can use for gathering information you need from others;
5. Get a calendar and mark it to indicate the target dates on which you will be sending/gathering information;
6. Check the calendar regularly; using the forms and procedures you've developed, share/gather information as needed;
7. Periodically, spend some time with each of the persons with whom you've been communicating, to review the adequacy of your coordination efforts; modify procedures as needed.

Several communication/coordination forms and plan sheets are included on the following pages. The sheets can be used, or modified and then used, as tools to help you in designing and implementing a system which will allow you to share information with those involved in serving children from your program.

PLAN SHEET FOR INFORMATION SHARING

Who needs information

____ Child study team
____ Principal
____ Program supervisor
____ Regular classroom teacher
____ Special education teacher
____ Reading specialist
____ Math specialist
____ Speech and language therapist
____ Physical therapist
____ Occupational therapist
____ Guidance counselor
____ Probation officer
____ Pyschologist
____ Physician
____ Parent/student
____ Other:

Needs what type of information

____ Initial assessment or evaluation information
____ Program structure; classroom organization information
____ Individual student program plans; IEPs, and/or IIPs
____ Student progress; monitoring information
____ Lesson plans
____ Classroom schedules; schedules for individual students
____ Other:

How frequently

____ Daily
____ Weekly
____ Bi-weekly
____ Monthly
____ Quarterly
____ Once per semester
____ Once per year
____ Other:

Strategies for sharing

____ Note
____ Letter
____ Phone call
____ Visit to classroom/office
____ Home visit
____ Conference
____ Team meeting
____ Other:

TODAY

Date..

People to contact/about: ✓

1

2

3

4

5

6

7

8

9

10

Follow-up: ✓

1

2

3

4

5

Phone Numbers and Addresses of Frequently Contacted People and Groups

Individual or group	Address	Phone

Additional Readings

Deno, S.L. and Mirkin, P.K. *Data-based Program Modification: A Manual*. Minneapolis, Minnesota: University of Minnesota, 1977.

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STUDENT GOALS

HOW TO SET AND ACHIEVE THEM

Module Five of the *Nevada Teachers' Resource Kit* is a product of
the Nevada Department of Education, Special
Education Division.

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PURPOSE

The purpose of Module Five, "Student Goals: How to Set and Achieve Them," is to provide information which will assist you as you begin establishing learning goals and subsequent learning sequences for students.

Initial assessment is the process of determining exactly what a student does and does not know. Using initial assessment information to determine long term learning goals allows you, and others with whom you work, to set goals which address specific areas of need for individual students. By establishing appropriate learning goals early, you increase your chance for success by specifying the exact target(s) toward which you will teach. Identifying appropriate sequences will help you and your students get there.

This module provides: (1) suggestions for using assessment information as the basis for writing goals; (2) strategies for writing appropriate goals; (3) aids to writing goals; (4) tactics for translating goals into usable teaching-learning steps; and (5) sample instructional sequences (starter sequences) for major goal areas.

ORGANIZATION

Module Five, organized in three major parts, provides information related to establishing and working toward achievement of learning goals. As you and your colleagues form teams to assess student performance, and to write Individual Education Programs, the following should facilitate your work.

Part One: Writing Goals:
  Using Assessment Information to Write Appropriate Goals.
  Aids for Goal Writers.
  Goal Planning Worksheets.
  Negotiating Hints.

Part Two: From Goals to Sequence Steps:
  Sequencing Teaching-Learning Steps.
  Setting Aims and Criteria for Sequence Steps.

Part Three: Additional Readings.

PART ONE/GOALS

USING ASSESSMENT INFORMATION TO WRITE APPROPRIATE GOALS

As a result of the Education for All Handicapped Children's Act (Public Law 94-142), you have, or soon will be involved in, multidisciplinary team efforts to evaluate student performance as a basis for future program planning.

In doing so, you and other team members will administer and score evaluation/assessment instruments. You will also be reviewing and synthesizing assessment information gathered in terms of eligibility and program planning.

When you are involved in using assessment information to determine eligibility, review local, state, and federal rules and regulations and specific eligibility criteria. Check to see that your program placement procedures are in compliance with prescribed guidelines.

When you are involved in using assessment information as a basis for establishing student learning goals, careful planning and preparation will help you work more effectively. The following guidelines should assist you in using assessment information as you write appropriate long term learning goals for students.

USING ASSESSMENT INFORMATION IN WRITING STUDENT LEARNING GOALS

1. Team collects all assessment data, results, and reports.

2. Team reviews and critiques assessment results in terms of appropriateness, and sorts information into two major categories:

(a) Assessment information which is *relevant* to planning an instructional program for the student in question; and

(b) Assessment information which is *not relevant* or does not contribute to writing an instructional program (Note: some of the assessment information collected will be appropriate for determining eligibility, but inappropriate for program planning; at this point, you want to be working only with the information which is directly related to program planning).

3. After each team member has reported results of program-relevant information, the team chairperson should make a statement, summarizing assessment findings, and proposing areas in which the student needs instruction.

4. As a group, the team then prioritizes the areas in which the student needs help (math, reading, job skills, self-help skills, writing skills, etc.).

5. Once areas are prioritized, the team writes a long term goal for each area. Long term goals generally are written for one school year, and include:

(a) *The target area* in which the team expects the student to grow (math, reading, spelling, gross motor skills, language, feeding, job skills, etc.).

(b) *The level of student performance expected* in each target area, i.e., independent feeding, walking with crutches, reading fluently from a fourth grade text, with comprehension, verbally answering multiplication facts, etc.

Write each goal in terms of student performance, not teacher performance. Avoid goals which state "use a multisensory

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approach to teach reading." Instead, state what it is you expect the student to do (in this case, "read"). Once goals are established you can begin determining the best instructional approaches for meeting those goals.

CHECKLIST: TEAM TASKS IN USING ASSESSMENT INFORMATION TO WRITE GOALS

_____ 1. Team collects all assessment data.

_____ 2. Team reviews and critiques results; sorts out irrelevant or inappropriate information.

_____ 3. Each team member reports results of program-relevant assessment.

_____ 4. Team chairperson summarizes assessment information, proposes major areas for instruction.

_____ 5. Team prioritizes areas in which goals will be written.

_____ 6. Team writes at least one long term goal for each priority area.

_____ 7. Written goals are included in the student's Individual Education Program.

AIDS FOR GOAL WRITERS

Becoming an efficient goal writer requires practice. And you'll find that as you continue to write goals, it becomes easier, and takes less time. Teachers with experience have recommended the following procedures as short-cuts to writing goals:

For Identifying Goals: Use a Predetermined List of Potential Areas

Because services to handicapped children within the district, across the state, and across the nation frequently focus on the same major areas, having a list of these areas facilitates team-work as multidisciplinary teams identify areas for writing goals.

By generating, for your own setting, a list of the major areas in which you provide instruction, you will have a list of the major areas in which most of your long term goals will be written.

To make this task easier, you may want to use the Potential Goal Areas worksheet on page 9. Make the sheet maximally useful by reviewing it with other team members, adding areas which are not included, and deleting those which seem inappropriate.

Duplicate the sheet you develop. Provide a copy for each team member to use during team meetings.

For Structuring Goals: Use a Consistent Format

By using a consistent format for goals, you and your fellow team members will be able to decrease the amount of time it takes to write goals.

Whichever format you select, it should include a place for: (a) the student's name, (b) the target curriculum area (either explicitly stated, or implied), (c) expected performance level, and (d) an indication of the target date.

Try several formats. Then, select one which works well, and use it consistently. Sample long term goal formats are included on page 18.

For Checking Adequacy of Goals: Critique the Goals You've Written

Time spent reviewing and critiqueing goals is time well-invested. By checking goals, you'll be able to provide feedback to team members when goals are well written. When checking reveals that goals are not adequately written, the team has an opportunity to revise goals accordingly.

Although your team may want to establish a set of procedures for reviewing goals, the following criteria are provided as a guide to assessing adequacy of long term goals:

- Does the goal include the student's name?
- Does the goal specify the target curriculum area?
- Does the goal specify the level of performance expected of the student?
- Does the goal specify the date by which the student is expected to reach the goal?
- Does the goal set a target around which an instructional program can be organized?

A set of sample goals is included on page 19 for your use. Try critiqueing them, using the criteria listed above.

POTENTIAL GOAL AREAS

sec/voc

CONSUMER SKILLS
- budgeting
- banking
- insurance
- permits/licenses
- apartment/home acquisition
- shopping
- getting information

INDEPENDENT LIVING
- food management
- home management
- child care
- telephone skills
- transportation
- lawn/garden management
- emergency/safety
- leisure time
- living adaptations
    - for visually impaired
    - for hiring impaired/deaf
    - for non-ambulatory

LANGUAGE **c**
- receptive language
    - vocabulary
    - listening comprehension
- expressive language (verbal)
    - vocabulary
    - syntax
    - phonology
    - morphology

- nonverbal communication
  - gesturing
  - signing
  - symbol systems

MATH: COMPUTATIONAL
- counting/numeration
- number/set correspondence
- facts (addition, subtraction, multiplication, division)
- computation (addition, subtraction, multiplication, division)
- fractions
- decimals
- percent
- charts/graphs
- geometry
- algebra

MATH: PRACTICAL
- time
- money
- measurement (weight, distance)
- word/story problems

MOTOR
- gross motor
- fine motor
- positioning
- locomotion
  - ambulation
  - wheelchair operation

OPPORTUNITIES FOR LEARNING
- school attendance
- task initiation
- on-task behavior
- task completion

PERCEPTUAL
- sensory perception
- directionality
- left-right
- laterality
- auditory perception
- visual perception

PRE-ACADEMICS
- numbers
- letters
- colors
- shapes

READING
- phonics/word attack
- vocabulary
  - selected
  - survival/essential
  - word lists
- slight words
- fluency
- comprehension

SPEECH

C

- articulation
  - stuctitutions
  - omissions
  - additions
  - distortions
- voice
  - hoarseness
  - pitch
  - hyponasality
  - hypernasality
  - stuttering

SPELLING
- say/write letters
- word patterns
- phonetically-regular
- sight words
- words in context
- in independent writing

SOCIAL
- self-identification
- self-concept
- self control
- social conversation
- interpersonal relations

STUDY SKILLS
- outlining
- dictionary skills
- library skills

ec SELF HELP
- feeding
- drinking
- toileting
- **sph** grooming
- dressing
- nasal hygiene
- oral hygiene

VOCATIONAL **sec/voc**
- career awareness
- job interview
- job application
- office skills
- voc/ag skills
- shop skills
- retail skills
- welding
- small engines
- janitorial/maintenance

WRITING
- handwriting, manuscript
- handwriting, cursive
- capitalization
- punctuation
- paragraphing
- creative writing
- report writing
- personal correspondence

SAMPLE LONG TERM GOAL FORMATS

1. By .... (date), ... (student) will .... (description of expected performance).

2. On or before the last day of school, ... (year),

   .... (student) will demonstrate .... (target skill)

   by .... (behavior student will perform to show mastery).

3. During the coming school year (..........-..........) (year), ... (student)

   will grow from currently being able to .... (performance level in target skill area)

   to being able to .... (performance in target skill area)

   at .... (expected performance) level.

EXERCISE: CRITIQUEING GOALS

Use the following criteria to critique the goals listed below, by writing a *yes* or *no* in each blank.

1. Does the goal include the student's name?
2. Does the goal specify the target curriculum area (either explicitly or implicitly)?
3. Does the goal specify the level of performance expected of the student?
4. Does the goal specify the date by which the student is expected to reach the goal?
5. Does the goal set a target around which an instructional program can be organized?

sec/voc

Adequate Inadequate

By June, 1979, the student will improve in math.
1.____ 2.____ 3.____ 4.____ 5.____ .... ☐ ☐

Andy will independently drive a stick shift, four-speed transmission car.
1.____ 2.____ 3.____ 4.____ 5.____ .... ☐ ☐

During the coming school year he will grow from currently being able to write some letters (x, o, s, t) to being able to write all letters, upper and lower case.
1.____ 2.____ 3.____ 4.____ 5.____ .... ☐ ☐

After instruction, Curt will walk, using his crutches, up and down a flight of ten stairs.
1.____ 2.____ 3.____ 4.____ 5.____ .... ☐ ☐

Try rewriting the goals that are inadequate. Check your work by comparing your responses against those on the next page.

A CHANCE TO CHECK YOUR OPINIONS

Use the following criteria to critique the goals listed below, by writing a *yes* or *no* in each blank.

1. Does the goal include the student's name?
2. Does the goal specify the target curriculum area (either explicitly or implicitly)?
3. Does the goal specify the level of performance expected of the student?
4. Does the goal specify the date by which the student is expected to reach the goal?
5. Does the goal set a target around which an instructional program can be organized?

Adequate Inadequate

By June 1979, the student will improve in math.

1. No 2. Yes 3. No 4. Yes 5. No .... ☐ ☒

Andy will independently drive a stick shift, four-speed transmission car.

1. Yes 2. Yes 3. No 4. No 5. Yes .... ☐ ☒

During the coming school year he will grow from currently being able to write some letters (x, o, s, t) to being able to write all letters, upper and lower case.

1. No 2. Yes 3. Yes 4. No 5. Yes .... ☐ ☒

After instruction, Curt will walk, using his crutches, up and down a flight of ten stairs.

1. Yes 2. Yes 3. Yes 4. No 5. Yes .... ☐ ☒

GOAL PLANNING WORKSHEETS

The *Goal Planning Sheet* which follows is included for your use in summarizing relevant assessment information, prioritizing areas in which students need to grow, and determining just what level of performance is expected by the end of the year.

The *Expected Performance Worksheet* is included for your use in gathering pertinent information from others regarding expectations for student growth. If you work with students who spend a portion of their day in the regular classroom, it will be beneficial, prior to establishing goals, to spend some time with the student's regular classroom teacher, finding out what he/she expects of regular students in each major curriculum area, by the end of the year.

Because some teachers may not yet have determined exactly what they expect of their regular students, you may need to set aside enough time to talk with teachers long enough to help them determine, for their own class, precisely what they expect students to master by the end of the school year.

If you are working with severely/profoundly handicapped students, use the worksheet to gather information from parents, group home managers, or institution attendants. Knowing their priorities and expectations will increase your chances of writing appropriate goals.

EXPECTATIONS WORKSHEET

Curriculum area	Skills to be acquired by the end of the year*	Materials

*In the regular classroom as a home or living situation priority.

GOAL PLANNING SHEET

Summary of Comprehensive Evaluation Information	Proposed Goals	
	Area of need	Expected level of performance

NEGOTIATING HINTS

There are two major topics around which teams tend to disagree:

1. Determining/prioritizing major areas in which the student needs to grow; and/or
2. Determining just how much growth to expect of the student during the coming school year.

When the team can't agree on *major areas* in which program goals should be written, list the areas which have been proposed, and review each in terms of:

1. Future utility of the skill, particularly once the student finishes school; is this a skill which will be useful and/or necessary in day-to-day living?
2. The degree to which mastery of skills in this area increases the student's chance for successful return to a regular classroom; does this area include skills which students are expected to perform in the regular classroom?
3. The degree to which the skill area is prerequisite to growth in other areas; does mastery of skills in this area contribute significantly to mastery of skills in other curriculum areas?

When the team can't agree on the *level of performance to expect*, review each area, and discuss proposed levels of expectation:

1. Remembering that the overriding goal is "catch-up," helping the student to catch up to his/her peers, which requires growing faster, achieving more than a month's growth for each month of instructions;
2. Recognizing that it seems to be better to aim too high than too low, thereby avoiding a situation in which you place an arbitrary ceiling on student growth;
3. Recalling that goals, once established, are not binding legal contracts, but can be changed as necessary during the school year.

PART TWO/SEQUENCES

SEQUENCING TEACHING-LEARNING STEPS

Once goals have been established, begin organizing instructional programs to meet those goals. As an appropriate first step, map out an instructional plan which will guide you and your students from current performance levels to levels commensurate with those established in the long term goals.

Teachers, over the years, have used a number of strategies for developing such a plan. No doubt, you've been exposed to a number of these—some, notably promising, others rather dreadful. The strategy detailed below and on the following pages is one which provides a systematic basis for determining just what it is students must learn in order to reach proposed goals.

Obtain Skill Sequences

Obtain a listing of skills, or a skills sequence which extends from the student's current performance level to the expected level. You could sit down and develop this yourself, but since sequences are available from a number of sources, you may as well save your energy for other tasks. Some sources are:

NTRK

Starter sequences for a number of skill areas are included in this module for use in instructional planning.

Special Projects

Many local, state, and federally-funded projects have developed skill sequences for teacher use. Contact those in your area.

Commercial Materials

Several commercial materials currently on the market provide lists of skills which are introduced in the material. In other cases, skill sequences can be developed by carefully reviewing the material, page by page, lesson by lesson, listing as you work, the skills which are introduced.

Assessment Materials

Many criterion-referenced testing systems, or instructional management systems currently available include listings of skills in various curriculum areas. With some modification, these can be used as a basis for sequencing skills.

Modify the Skill Sequences

Once you have obtained a skill sequence, review and study the sequence. Check it thoroughly; ask fellow teachers or curriculum specialists to review it. Then modify the sequence until it is appropriate for your particular program. Procedures for modifying skill sequences include:

Adding Skills

You may need to add skills *at the beginning* of the sequence, to lower the level of initial skills. You'll want the sequences to begin at levels equal to the lowest-performing student in your program.

You may need to *extend the sequence,* to cover more advanced skills than the sequence currently includes. Sequences should "top out" at levels equal to or surpassing those specified in the long term goals of your students.

You may need to add skills *in particular parts* of the sequence, where you feel essential skills have been omitted.

Deleting Skills

You may find skills which are not appropriate to your students, or skills which, although considered "valuable," are not critical. Eliminate them, or mark them as optional.

Re-ordering Skills

In order to coordinate your instructional skill sequences with curriculum materials, or with other programs (a regular class-room program, perhaps), or to modify sequences to more accurately reflect your own teaching preferences, you may need to alter the order in which specific skills occur, within the sequence.

Meshing Skill Steps

You may find it necessary to alter the sequence by combining two or more sequence steps into one step. This is most frequently done to make a sequence more manageable.

Slicing Back

You may find it appropriate to divide an existing step into several steps. This is generally done to structure smaller sets of new material for students who have learning problems.

Using and Reusing Skill Sequences

You may be feeling a bit overwhelmed at the prospect of creating, for each student in your program, and for every long term goal, a sequence of skills which can be used as an instructional roadmap.

Relax.

Remember, many of those goals, although written for individual students, reflect common skill areas. Consequently, you need only develop sets of skill sequences for the curriulum areas reflected in long term goals. If you establish sequences which are fairly comprehensive in scope (ranging from low initial skills through complex skills), you will be able to use the same sequences for several students.

To tailor instructional programming for individual students, start with the basic sequence. Begin with the sequence step appropriate to that student (based on initial assessment information). Then, as the student progresses, modify the sequence (slicing back, combining steps, adding or deleting steps) as needed.

Whenever possible use a sequence of skills which is used with or appropriate for students in the next-least-restrictive environment (see Module One, Part Two).

sph

Thus, if you are teaching profoundly handicapped students, be aware of the skills your students would need to function in a classroom of less severely handicapped students.

mld/mod

If you are teaching moderately handicapped students in a self-contained classroom, be aware of the skills required in a resource classroom setting.

And, if you are serving students in a resource classroom, try to coordinate the skills you are teaching with the skills being taught in the regular classroom in which your students spend the remainder of their school day.

Once you have developed a series of skill sequences with which you feel comfortable use them. Make a master sheet of each and duplicate it. You'll find that skill sequence lists can be used time and time again. For example:

1. Use the sequences as a basis for writing short-term objectives for students' Instruction Implementation Plans (IIPs);
2. Use the sequence lists as a basis for communicating with other teachers the precise skills on which you are currently working with particular students;
3. Use the sequence lists as a way of indicating skill areas in which you are looking for instructional materials and ideas, or for which you are willing to share the same;
4. Use the sequences as a motivator for student performance by having students mark off the skills they have mastered;
5. Use the sequence lists as a means of communicating program content with administrators and supervisors;
6. Use the sequences as a way of documenting, for your own reinforcement, the progress you and your students have made;

7. Use the sequence lists as a basis for parent conferencing, or parent reports;
8. Use the sequence lists as a record of student performance for students who are moving or transferring to another program or school;
9. Use the sequence lists as a way of recording student progress and of presenting progress information to fellow team members during annual review meetings or program reviews.

Sample sequences for selected skill areas are included on the following pages for your use in establishing skill sequences appropriate to the long-term goals toward which your students are working.

Source: SCAT Project, Boise, ID

Curriculum area: Math

Skill area: Rote Counting 1-10

Entry skills: Repeats from memory a series of 3 objects; pronounces the name of numerals

Sequence steps:

1. Teacher counts 1-9, student provides 10.
2. Teacher counts 1-8, student provides 9, 10.
3. Teacher counts 1-7, student provides 8, 9, 10.
4. Teacher counts 1-6, student provides 7, 8, 9, 10.
5. Teacher counts 1-5, student provides 6, 7, 8, 9, 10.
6. Teacher counts 1-4, student provides 5-10.
7. Teacher counts 1-3, student provides 4-10.
8. Teacher counts 1-2, student provides 3-10.
9. Teacher counts 1, student provides 2-10.
10. Student counts 1-10.

Source: SCAT Project, Boise, ID

Curriculum area: Math

Skill area: Addition facts: single digit + single digit sums to 18

Entry skills: Names numerals to 18, associates number with numeral, combines sets, writes numerals to 18

Sequence steps:

1. Sums 0, 1.
2. Sums 0, 1, 2.
3. Sums 1, 2, 3.

4. Sums 2, 3, 4.
5. Sums 3, 4, 5.
6. Review: sums to 5.
7. Sums 4, 5, 6.
8. Sums 5, 6, 7.
9. Sums 6, 7, 8.
10. Sums 7, 8, 9.
11. Sums 8, 9, 10.
12. Review: sums to 10.
13. Sums to 9, 10, 11.
14. Sums to 10, 11, 12.
15. Sums to 11, 12, 13.
16. Sums to 12, 13, 14.
17. Sums to 13, 14, 15.
18. Sums to 15, 16, 17, 18.
19. Review: sums to 18.

Source: SCAT Project, Boise, ID

Curriculum area: Math

Skill area: Subtraction facts: minuend to 18, subtrahend to 9

Entry skills: Names numerals to 18, associates number to numeral, takes sets apart, writes numerals to 9, solves addition facts

Sequence steps:

1. Minuend of 0, 1, 2.
2. Minuend of 1, 2, 3.
3. Minuend of 2, 3, 4.
4. Minuend of 3, 4, 5.
5. Minuend of 0 to 5: review.
6. Minuend of 4, 5, 6.
7. Minuend of 5, 6, 7.
8. Minuend of 6, 7, 8.
9. Minuend of 7, 8, 9.
10. Minuend of 8, 9, 10.
11. Minuend of 0 to 10: review.
12. Minuend of 9, 10, 11.
13. Minuend of 10, 11, 12.
14. Minuend of 11, 12, 13.
15. Minuend of 12, 13, 14.
16. Minuend of 13, 14, 15.
17. Minuend of 14, 15, 16.

18. Minuend of 15, 16, 17.
19. Minuend of 11 to 18: review.
20. Minuend of 0 to 18: review.

Source: SCAT Project, Boise, ID

Curriculum area: Math

Skill area: Division computation

Entry skills: See Division Facts

Sequence steps:

1. 1-digit into 2-digit, 1 subtraction with remainder.
2. 1-digit into 2-digit, 2 subtractions, no remainder.
3. 1-digit into 2-digit, 2 subtractions, with remainder.
4. 1-digit into 3-digit, 2 subtractions, no remainder.
5. 1-digit into 3-digit, 2 subtractions with remainder.
6. 1-digit into 3-digit, 3 subtractions, no remainder.
7. 1-digit into 3-digit, 3 subtractions with remainder.
8. 2-digit into 2-digit, 1 subtraction, no remainder.
9. 2-digit into 2-digit, 1 subtraction with remainder.
10. 2-digit into 3-digit, 1 subtraction, no remainder. (Usually more difficult to estimate product.)
11. 2-digit into 3-digit, 1 subtraction, remainder.
12. 2-digit into 3-digit, 2 subtractions, no remainder.
13. 2-digit into 3-digit, 2 subtractions, remainder.

Source: SCAT Project, Boise, ID

Curriculum area: Math

Skill area: Multiplication computation

Entry skills: See Multiplication Facts, Addition Facts

Sequence steps:

1. 1-digit x 2-digit, no regrouping.
2. 1-digit x 3-digit, no regrouping.
3. 1-digit x 4-digit, no regrouping.
4. 1-digit x 2-digit, regrouping.
5. 1-digit x 3-digit, regrouping.
6. 1-digit x 4-digit, regrouping.
7. 2-digit x 2-digit, no regrouping.
8. 2-digit x 2-digit, regrouping.
9. 2-digit x 3-digit, no regrouping.
10. 2-digit x 3-digit, regrouping.
11. 3-digit x 3-digit, no regrouping.
12. 3-digit x 3-digit, regrouping.

Source: SCAT Project, Boise, ID

Curriculum area: Math

Skill area: Money

Entry skills: Count by 1, 5, and 10 to 100

Sequence steps:

Steps 1-6 include, for each step:

- (a) Match coin to coin with 1 or 2 coin distractors.
- (b) Match coin to coin with all coins as distractors.
- (c) Match front side of coin with back side.
- (d) Identify coin from 1 or 2 coin distractors.
- (e) Identify coin from all coins as distractors.
- (f) Name coin verbally.

1. Penny.
2. Nickel.
3. Dime.
4. Quarter.
5. Half Dollar.
6. Says value of penny:
   - (a) Matches written value with penny.
   - (b) Writes value for penny.
7. Says value of nickel:
   - (a) Matches written value with nickel.
   - (b) Writes value for nickel.
   - (c) Gives equivalent value in pennies.
8. Says value of dime:
   - (a) Matches written value with dime.
   - (b) Writes value for dime.
   - (c) Gives equivalent value in pennies.
   - (d) Gives equivalent value in nickels.
   - (e) Gives equivalent value in nickels and pennies.
9. Says value of quarter:
   - (a) Matches written value with quarter.
   - (b) Writes value for quarter.
   - (c) Gives equivalent value in pennies.
   - (d) Gives equivalent value in nickels.
   - (e) Gives equivalent value in pennies, nickels, dimes.
10. Says value of half-dollar:
    - (a) Matches written value with half dollar.
    - (b) Writes value for half dollar.
    - (c) Gives equivalent value in pennies, nickels, dimes and quarters.
11. When given a set of coins, can tell which coin is of greatest value.

12. Counts pennies to 10 cents.
13. Counts nickels to $1.00.
14. Counts dimes to $1.00.
15. Counts quarters to $1.00.
16. Counts half dollars to $1.00.
17. Counts values of coin and writes amount:
    - (a) To 5 cents.
    - (b) To 10 cents.
    - (c) To 15 cents.
    - (d) To 20 cents.
    - (e) To 25 cents.
    - (f) To 30 cents.
    - (g) To 35 cents.
    - (h) [illegible] 40 cents.
    - (i) To 45 cents.
    - (j) To 50 cents.
18. When given verbal or written cue, selects from group of coins exact amount with values:
    - (a) To 5 cents.
    - (b) To 10 cents.
    - (c) To 15 cents.
    - (d) To 20 cents.
    - (e) To 25 cents.
    - (f) To 30 cents.
    - (g) To 35 cents.
    - (h) To 40 cents.
    - (i) To 45 cents.
    - (j) To 50 cents.
19. Matches dollar to dollar:
    - (a) Match dollar front and back.
    - (b) Identify dollar.
    - (c) Name dollar.
    - (d) Says value of dollar.
    - (e) Matches with written value.
    - (f) Writes value using dollar sign and decimal.
    - (g) Gives equivalent value in pennies, nickels, dimes, quarters, and half dollars.
20. Counts values to coin and writes amount:
    - (a) To 55 cents.
    - (b) To 60 cents.
    - (c) To 65 cents.
    - (d) To 70 cents.
    - (e) To 75 cents.
    - (f) To 80 cents.
    - (g) To 85 cents.

    (h) To 90 cents.
    (i) To 95 cents.
    (j) To $1.00.

21. Money addition:
    (a) Adds sums less than 50 cents, no regrouping.
    (b) Adds sums less than $1.00, no regrouping.
    (c) Adds dollar and cents, no regrouping.
    (d) Adds even dollars with cents.
    (e) Adds dollar and cents with regrouping.
22. Money subtraction:
    (a) Subtracts money less than 50 cents, no regrouping.
    (b) Subtracts money less than $1.00, no regrouping.
    (c) Subtracts dollar and cents with no regrouping.
    (d) Subtracts dollar and cents with regrouping.
23. Counts dollar bills to $10.00:
    (a) Counts five dollar bills to $20.00.
    (b) Counts ten dollar bills to $50.00.
24. Counts values of dollars and coins and writes amounts:
    (a) To $2.00.
    (b) To $5.00.
    (c) To $10.00
    (d) To $20.00.
25. When given verbal or written cue, selects from group of coins and bills exact amount with values:
    (a) To $2.00.
    (b) To $5.00.
    (c) To $10.00.
    (d) To $50.00.
26. Shows different combinations of coins and bills equalling the same amount:
    (a) To $.25.
    (b) To $.50.
    (c) To $1.00.
    (d) To $2.00.
    (e) To $5.00.
    (f) To $10.00.
    (g) To $20.00.
27. Makes change:
    (a) To $.25.
    (b) To $.50.
    (c) To $1.00.
    (d) To $2.00.
    (e) To $5.00.
    (f) To $10.00.
    (g) To $20.00.

28. Advanced money addition:
    - (a) Adds sums to $9.99, no regrouping.
    - (b) Adds sums to $9.99, with regrouping.
    - (c) Adds sums to $99.99, no regrouping.
    - (d) Adds sums to $99.99, with regrouping.

29. Advanced money subtraction:
    - (a) Subtracts sums less than $9.99, no regrouping.
    - (b) Subtracts sums less than $9.99, with regrouping.
    - (c) Subtracts sums less than $99.99, no regrouping.
    - (d) Subtracts sums less than $99.99 with regrouping.

Source:	SCAT Project, Boise, ID
Curriculum area:	Math
Skill area:	Time telling
Entry skills:	Names numerals to 12, rote counts by 1's to 60 from any digit, rote counts by 5's to 60 from any interval

Sequence steps:

1. Readiness for time telling:
    - (a) Points to hour hand.
    - (b) Points to minute hand.
    - (c) Shows direction the hands move.
    - (d) Reads written times (10:45, 2:30).

Note: For steps 2-9, at each level the student:
- (a) Reads time when shown clock.
- (b) Writes time when shown clock.
- (c) Sets hands to given time from oral/written cue.

2. Tells time to the hour.
3. Tells time to the 1/2 hour.
4. Tells time to the quarter hour (15 min. after the hour).
5. Tells time to __:45 (45 min. after the hour).
6. Tells time to the 5 minute (from 0-30 minutes after the hour).
7. Tells time to the 5 minute (from 30-55 minutes after the hour).
8. Tells time to the minute (from 0-30 minutes after the hour).
9. Tells time to the minute (from 31-59 minutes after the hour).
10. Tells time to the 1/2 hour using term "half past":
    - (a) Reads time on clock using "half past" term.
    - (b) Sets hands on clock from written/oral cue of "half past".
11. Tells time to __:15 using terms "quarter after":
    - (a) Reads time when shown clock using "quarter after".
    - (b) Sets hands on clock from written/oral cue of "quarter after".

12. Tells time to __:45 using terms "quarter to/till".
    (a) Reads time on clock using "quarter to/till".
    (b) Sets hands on clock from written/oral cue of "quarter to/till".
13. Tells time to the minute from 0-30 minutes after the hour using the terms __minutes "after", and __ minutes "past" the hour:
    (a) Reads time on clock using terms "past" and "after".
    (b) Sets time on clock from oral/written cue using "past" or "after" the hour.
14. Tells time to the minute from 31-59 minutes after the hour using terms __ minutes "to" and __ minutes "before" the hour:
    (a) Reads time on clock using terms "to" and "before" the hour.
    (b) Sets time on clock from oral/written cue using "to" or "before" the hour.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Academics

Skill area: Math

Sequence steps:

1. Says amount-number correspondence 0-10.
2. Reads numbers 0-9.
3. Writes numbers 0-9.
4. Says numbers 0-20 in sequence, rote counting.
5. Says amount-number correspondence 0-20.
6. Reads numbers 0-20.
7. Writes numbers 0-20.
8. Says numbers 0-50 in sequence, rote counting.
9. Identify bigger/smaller number 0-20.
10. Ordinal numbers 1st-20th.
11. Reads numbers 0-50.
12. Writes numbers 0-50.
13. Reads/writes math symbols +, =.
14. Says/writes answers to addition facts:
    (a) Factors 0-5.
    (b) Factors 0-9.
15. Reads/writes math symbols —, =.

16. Says/writes answers to subtraction facts:
    (a) Factors 0-5.
    (b) Factors 0-9.
    (c) Factors 0-18.
17. Reads/writes numbers 0-999.
18. Writes answers to addition problems:
    (a) 2-digit + 2-digit, no regrouping.
    (b) 3-digit + 3-digit, no regrouping.
    (c) 2-digit + 1-digit, with regrouping.
    (d) 2-digit + 2-digit, with regrouping.
    (e) 3-digit + 3-digit, with regrouping, tens and hundreds.
    (f) Column addition of 4 2-digit numbers.
19. Writes answers to subtraction problems:
    (a) 2-digit — 1-digit, no regrouping.
    (b) 2-digit — 2-digit, no regrouping.
    (c) 3-digit — 3-digit, no regrouping.
    (d) 2-digit — 2-digit, with regrouping, tens and ones.
    (e) 3-digit — 3-digit, with regrouping hundreds, tens and ones.
20. Skip counting.
    (a) Counting by 2's.
    (b) Counting by 5's.
    (c) Counting by 10's.
21. Reads/writes math symbols +, —, =, x.
22. Says/writes answers to 1-step story problems:
    (a) Addition.
    (b) Subtraction.
23. Says/writes answers to 2 and 3 step story problems:
    (a) Addition.
    (b) Subtraction.
24. Says/writes answers to multiplication facts:
    (a) 1's, 5's, 10's.
    (b) 2's, 4's.
    (c) 3's, 6's, 9's.
    (d) 7's, 8's.
    (e) All facts.
25. Writes answers to multiplication problems:
    (a) 1-digit x 2-digit, no regrouping.
    (b) 1-digit x 3-digit, no regrouping.
    (c) 2-digit x 2-digit, with regrouping.
    (d) 2-digit x 3-digit, with regrouping.
26. Reads/marks fractional parts:
    (a) 1/2, 1/4, 1/8.
    (b) 1/3.
27. Identifies common multiples of two fractions.

28. Identifies lowest common denominator of fractions.
29. Expands fraction.
30. Reduces fraction.
31. Writes answers to fraction computation, common denominators:
    (a) Addition.
    (b) Subtraction.
    (c) Multiplication.
    (d) Division.
32. Writes answers to fraction computation, mixed denominators:
    (a) Addition.
    (b) Subtraction.
    (c) Multiplication.
    (d) Division.
33. Says/writes answers to division facts:
    (a) 0-5.
    (b) 0-9.
34. Writes answers to division problems:
    (a) 2-digit div. by 1-digit, no remainders.
    (b) 2-digit div. by 2-digit, no remainders.
    (c) 2-digit div. by 1-digit, with remainders.
    (d) 2-digit div. by 2-digit, with remainders.
    (e) 3-digit div. by 1-digit, with remainders.
    (f) 3-digit div. by 2-digit, with remainders.
35. Says/writes answers to 1-step story problems:
    (a) Multiplication.
    (b) Division.
36. Says/writes answers to 2-3 step story problems:
    (a) Multiplication.
    (b) Division.
37. Reads/writes math symbols +, —, x, ÷.
38. Reads/writes decimal numbers.
39. Writes answers to computation problems with decimal numbers:
    (a) Addition, subtraction.
    (b) Multiplication, division.
40. Reads/writes percent numbers.
41. Writes answers to percent computation problems.
42. Reads/interprets graphs:
    (a) Bar graphs.
    (b) Line graphs.
    (c) Circle/pie graphs.
43. Estimates amounts for computation:
    (a) Addition.

(b) Subtraction.
(c) Multiplication.
(d) Division.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Math

Skill area: Practical Measurement

Sequence steps:

1. Sorts objects into continuum:
    - (a) By length.
    - (b) By weight.
    - (c) By size.
2. Measures objects by the inch:
    - (a) 0-12″ using ruler.
    - (b) 13-36″ using yardstick.
    - (c) 0-48″ using measuring tape.
3. Weights objects to the nearest pound.
4. Measures liquids:
    - (a) 1 cup.
    - (b) 1/2, 1/4 cup.
    - (c) 1/3 cup.
5. Measures dry ingredients:
    - (a) 1 cup, 1/2, 1/3, 1/4 cups.
    - (b) 1 tablespoon.
    - (c) 1 teaspoon, 1/2, 1/4, 1/8 teaspoon.
6. Weighs objects by the pound and ounce.
7. Measures liquid:
    - (a) 1 pint.
    - (b) 1 quart.
    - (c) 1 gallon.
8. Measures length to the quarter inch:
    - (a) 0-12″ using ruler.
    - (b) 13-16″ using yardstick.
9. Tells linear measurement facts.
10. Tells weight measurement facts.
11. Tells counting facts.
12. Tells metric measurement facts.
13. Converts yards, feet, inches.
14. Converts ounces, pounds.
15. Converts cups, pints, quarts.

16. Measures liquids/dry ingredients using metric measures.
17. Converts metric measures:
    - (a) Liters (volume).
    - (b) Grams (weight).
    - (c) Meters (length).

Source: Design for Human Development, Newburyport, MA

Skill Area: Study skills

Sequence steps:

1. Identifying main idea.
2. Summarizing:
    - (a) A paragraph.
    - (b) A story.
    - (c) A speech.
3. Outlining:
    - (a) Orally presented material.
    - (b) Print material.
4. Using the dictionary:
    - (a) Locating the word (alphabetization).
    - (b) Finding the right meaning.
    - (c) Interpreting pronunciation.
    - (d) Using dictionary special sections.
5. Using reference materials:
    - (a) Encyclopedias.
    - (b) Almanacs.
    - (c) Atlases.
    - (d) Reader's guide.
6. Library skills:
    - (a) Dewey Decimal System location.
    - (b) Card catalogue.

Source: SCAT Project, Boise, ID

Curriculum area: Reading

Skill area: Phonics analysis—word analysis/structural analysis

Entry skills: Name letters (optional)

Sequence steps:

1. Says single consonant sounds:
    - (a) Initial position.
    - (b) Final position.
    - (c) Isolation.

2. Says consonant blends (l, r, s):
   - (a) Two-letter blends.
   - (b) Three-letter blends.
3. Says consonant digraphs (sh, th, ch, wh).
4. Says short vowel sounds:
   - (a) In isolation.
   - (b) CVC pattern (hat).
   - (c) CCVC pattern (slip).
   - (d) CVCC pattern (lost).
   - (e) Closed syllable patterns.
5. Says long vowels:
   - (a) In isolation.
   - (b) In CVCE pattern (hate).
   - (c) In open syllable pattern (he).
6. Says long vowel digraphs (ai, ay, oa, ee, ea).
7. Says r-controlled vowels.
8. Says other vowel digraphs.
9. Says vowel diphthongs (oi, oy, aw, au, oo).
10. Says l and w controlled vowels.
11. Says words with silent letters (mb, wr, kn).
12. Says words with inflectional endings:
    - (a) s, ed, ing, es.
    - (b) er, est (comparisons).
    - (c) Unaltered roots.
    - (d) Final consonant doubled.
    - (e) Final e dropped.
    - (f) y changed to an i.
13. Says words with prefixes.
14. Says words with suffixes.
15. Says compound words.
16. Says words with possessive:
    - (a) Singular.
    - (b) Plural.
    - (c) Pronoun.
    - (d) Non-apostrophe.
17. Says contractions.
18. Says multi-syllable words:
    - (a) VC/CV.
    - (b) V/CV and VC/V.
    - (c) -CLE.
    - (d) Affixes.
    - (e) Compound words.
    - (f) Odd patterns (V/V, etc.).
19. Says words with accent.

Source: SCAT Project, Boise, ID

Curriculum area: Reading

Skill area: Comprehension skills

Entry skills: Reads phonetically regular words, reads sight words, reads words in context

Sequence steps:
1. Literal thinking skills:
   (a) Recognition of explicitly stated:
      (1) Details.
      (2) Main idea.
      (3) Sequential order.
      (4) Relationships:
   (a) Comparison/contrast.
   (b) Cause and effect.
   (c) Recall of explicitly stated:
      (1) Details.
      (2) Main idea.
      (3) Sequential order.
      (4) Relationships:
   (a) Comparison/contrast.
   (b) Cause and effect.
   (c) Restatement of material/events.
2. Inferential thinking skills:
   (a) Infers main idea.
   (b) Infers supporting details.
   (c) Infers generalizations.
   (d) Infers sequence.
   (e) Infers relationships:
      (1) Comparison/contrast.
      (2) Cause and effect.
   (f) Predicts outcomes.
   (g) Extends ideas.
   (h) Interprets figurative language.
3. Critical thinking skills:
   (a) Distinguishes real from fantasy.
   (b) Distinguishes fact from opinion.
   (c) Determines accuracy of material:
      (1) Internal validity.
      (2) External validity.
   (d) Determines author's purpose/bias.
   (e) Detects use of propaganda devices.
4. Creative thinking skills:
   (a) Responds to author's viewpoint.

(b) Responds to author's style:
  (1) Choice of words.
  (2) Characters.

Source: SCAT Project, Boise, ID

Curriculum area: Reading

Skill area: Prefixes

Entry skills: Reads phonetically regular words, reads sight words

Sequence steps:

1. Decodes prefix in isolation.
2. Decodes word with prefix when root is from sight vocabulary.
3. Decodes word with prefix in context when root is from sight vocabulary.
4. Decodes word with prefix when root is phonetically regular.
5. Decodes word with prefix in context when root is phonetically regular.
6. Correctly uses prefix and adds prefix to root word from meaning in context.

Source: SCAT Project, Boise, ID

Curriculum area: Reading

Skill area: Suffixes

Entry skills: Reads phonetically regular words, reads sight words

Sequence steps:

Same sequence applies for teaching:
  (a) Adjective forming suffixes.
  (b) Noun forming suffixes.
  (c) Adverb forming suffixes (omit steps 5-9).

1. Decodes suffix in isolation.
2. Decodes words containing suffix, root is structurally unaltered.
3. Decodes words containing suffix in context, root word is structurally unaltered.
4. Corrects form and uses correctly in context (both meaning and grammar correct) in words with suffixes where root is structurally unchanged.
5. Decodes words containing suffix in which letters are added to the root (slap-slapping).
6. Decodes in context words containing suffix in which letters are added to root word.

7. Correctly form (both meaning and grammar) in context words with suffixes in which letters are added to the root word.
8. Decodes words containing suffix in which last letter is deleted.
9. Decodes in context in which last letter in word is deleted before adding suffix.
10. Correctly form (both meaning and grammar) suffixed words in context in which last letter of root has been deleted.
11. Decodes words when last letter of root is changed.
12. Decodes words in context in which last letter or root is changed.
13. Correctly forms words with suffixes (both meaning and grammar) in which the last letter of the root word is changed.

Source:	SCAT Project, Boise, ID
Curriculum area:	Writing
Skill area:	Printing manuscript letters
Entry skills:	Holds pencil, makes/draws lines

Sequence steps:
Teaching steps:
1. Traces model of letter.
2. Traces over dotted-line model of letter.
3. Forms letter when model given with starting point.
4. Forms letter when model provided.
5. Forms letter, model given and quickly removed.
6. Forms letter to verbal cue (make an a).

Sequence of letters:
1. Lower case letters:
   (a) Straight line letters (i, l, t).
   (b) Straight and slant line letters (v, w, z, k).
   (c) Circle and line letters (o, s, c, e), (a, d, q, g), (r, n, m, h), (b, p, u, y, j).
2. Upper case letters:
   (a) Straight line letters (I, T, L, H, E, F).
   (b) Straight and slant line letters (A, V, W, X, Y), (N, M, K, Z).
   (c) Circle and line letters (D, B, P, R), (C, O, Q, G), (S, U, T).

Source:	SCAT Project, Boise, ID
Curriculum area:	Writing
Skill area:	Cursive handwriting

Sequence steps:

1. Lower case letters (based on starting point and initial stroke):
    - (a) Loop letters (e, f, l, k, h, b).
    - (b) Rounded letters (a, g, d, q, c, o).
    - (c) Trace-back letters (i, j, p, t, u, w).
    - (d) Hooked-letters (m, n, v, y, z, x).
    - (e) Other letters (r, s).
2. Upper case letters:
    - (a) (P, B, R, L).
    - (b) (A, D, O).
    - (c) (E, C).
    - (d) (H, K, N, M, Z, U, V, W, Y, X).
    - (e) (G, S).
3. Connections:
    - (a) Flow-in connections (starting point of letters are not altered when connected with other letters) (it, elf, kite).
    - (b) Trace-back connections (starting point letter altered) add, lack, dig, quack, land.
    - (c) "In-the-air connections" (starting point of *next* letter altered):

wake voted bone
when block

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Writing

Skill area: Writing

Sequence steps:

1. Scribbles:
    - (a) Pencil in fist.
    - (b) Pencil in fingers.
2. Draws lines:
    - (a) From one point to another.
    - (b) Between 2 parallel lines.
3. Copies lines and shapes:
    - (a) Horizontal, vertical and diagonal lines.
    - (b) Squares, circles.
    - (c) Triangle, diamond.
4. Copies letters, words.

5. Draws shapes:
    - (a) Circle.
    - (b) Square.
    - (c) Triangle.
    - (d) Diamond.
6. Writes numerals 0-9.
7. Prints letters, lower case.
8. Prints own first name.
9. Writes phone number.
10. Prints letters, upper and lower case.
11. Prints own full name.
12. Writes sentences:
    - (a) 2-5 word sentence, with capital, period.
    - (b) 5-10 word sentence, with capital, period.
13. Writes questions:
    - (a) Wh questions (who, when, why, where, what, how).
    - (b) Inverted subject-verb questions.
14. Uses punctuation:
    - (a) Ending punctuation: period, question mark.
    - (b) Comma.
15. Capitalizes:
    - (a) First word of sentences.
    - (b) Names.
16. Writes own full address.
17. Writes paragraph:
    - (a) Topic sentence.
    - (b) Supporting sentences.
    - (c) 3-5 sentence paragraph.
18. Addresses letter, envelopes.
19. Writes cursive:
    - (a) Letters.
    - (b) Words.
20. Writes compound sentences.
21. Uses punctuation:
    - (a) Apostrophe.
    - (b) Quotation marks.
22. Uses capitalization:
    - (a) Days of the week, months of the year.
    - (b) Cities, states.
23. Writes letters:
    - (a) Personal letters.
    - (b) Business letters.

Source: SCAT Project, Boise, ID

Curriculum area: Writing

Skill area: Writing a paragraph

Entry skills: Writes simple sentence with action/naming words, gives three-four sentence answer to question, gives three-four sentences on the same subject

Sequence steps:

Steps 1-5: Given a topic . . .

1. Writes 2 sentences that both relate to the topic.
2. Writes 3 related sentences.
3. Writes a summary sentence and 1 supportive sentence.
4. Writes a summary sentence and 2 supportive sentences.
5. Writes a summary sentence and 3 supportive sentences.
6. Given a properly indented and completed sentence adds punctuation.
7. Given a list of 3 sentences, arranges into paragraph form, including indenting, punctuation, periods, capitals.
8. Given a topic, writes a summary sentence and 2 supportive sentences using proper paragraph form.
9. Given a topic, writes a summary sentence and 3 supportive sentences using proper paragraph form.
10. Given a question from context material, forms a paragraph of at least 3 sentences to answer the question.
11. Given a contextual article or story, writes a summary paragraph of at least 3 sentences in proper paragraph form.

Source: Design for Human Development
Newburyport, MA

Curriculum area: Writing

Skill area: Written composition

Sequence steps:

1. Capitalization:
   - (a) Names.
   - (b) Titles.
   - (c) Days.
   - (d) Months.
   - (e) Cities.
   - (f) States.
   - (g) Countries.
   - (h) Beginning sentences.

2. Punctuation:
    - (a) Periods.
    - (b) Commas.
    - (c) Quotation marks.
    - (d) Colon.
    - (e) Hyphen.
    - (f) Underlining.
    - (g) Apostrophes.
3. Sentence structure:
    - (a) Word order.
    - (b) Subject-verb agreement.
    - (c) Complete sentence vs. fragment, run-on.
4. Manuscript form:
    - (a) Paragraph.
    - (b) Short story.
    - (c) Reports.
    - (d) Letters, friendly and business.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Spelling

Sequence steps:

1. Encodes (write/say) letter, given letter name.
2. Encodes consonant letter, given consonant sound.
3. Encodes vowel letter, given short vowel sound.
4. Encodes CVC words:
    - (a) Short a.
    - (b) Short i.
    - (c) Short o.
    - (d) Short u.
    - (e) Short e.
5. Encodes digraphs (sh, th, ch, wh, ph).
6. Encodes consonant blends (1 blends, s blends, r blends).
7. Encodes short vowel words with blends and digraphs:
    - (a) CCVC (slip).
    - (b) CVCC (bend).
    - (c) CCVCC (blast).
8. Encodes CVC/CVC 2-syllable words (napkin).
9. Encodes CVCE long vowel words:
    - (a) Long a.
    - (b) Long i.
    - (c) Long o.

(d) Long u.
(e) There is no CVCE pattern for e since there are so few words.

10. Encodes sight words (group a).
11. Encodes CVVC words with vowel combinations:
    (a) Long vowel sound: ai, ay, igh, oa, ee, ea.
    (b) Vowel team oi, oy, aw, au, oo (both sounds).
12. Encodes words with r-controlled vowels:
    (a) ar, are, air.
    (b) ir, ire.
    (c) or, oar, ore.
    (d) ur, ure.
    (e) er, ear, ere.
13. Review: encodes words with all patterns to date.
14. Encodes words with silent consonants (kn, gn, wr, mb).
15. Encodes words with endings:
    (a) -s, -es, -ing added to unaltered roots.
    (b) -s, -es, -ing added to altered roots.
    (c) -er, -est added to unaltered roots, and altered roots.
16. Encodes sight words (group b).
17. Encodes contractions.
18. Encodes words with prefixes.
19. Encodes words with suffixes.
20. Encodes compound words.
21. Encodes 2 and 3 syllable words.
22. Review: encodes words with all patterns to date.
23. Encodes selected sight words (group c).
24. Encodes job survival words.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Self-Help

Skill area: Feeding-Eating

Entry skills: Opens mouth when physically stimulated by spoon held by adult, opens mouth voluntarily at sight of food, removes semi-liquid food from spoon with lips, when being fed, allows spoon to be removed from mouth, retains all semi-solid/solid food from spoon, no spitting/no drooling, moves food in mouth with tongue, eats finger foods offered by adult

Sequence steps:

1. Separates finger foods by hand, pulls off pieces.
2. Carries finger foods to mouth and bites off pieces.
3. Swallows one bite of finger food before adding more to mouth.
4. Bites off appropriate size pieces of finger foods, using teeth.
5. Fills fist-held spoon, inserts into mouth, turns spoon in mouth.
6. Fills fist-held spoon, inserts into mouth, without turning.
7. Eats, holding spoon in fist, some spilling.
8. Eats, holding spoon in fingers.
9. Eats, holding fork in fist, some spilling.
10. Eats, holding fork in fingers, separates foods, dips into foods, spears.
11. Swallows food in mouth before taking another bite.
12. Uses spoon for liquids and semi-solids, fork for solids.
13. Carries own tray through serving line in cafeteria.
14. Spreads with knife (jams, butter, etc.).
15. Cuts with knife and fork.
16. Prepares foods for eating (peels bananas, eggs, etc.).
17. Opens containers, removes foods, unwraps foods.
18. Serves self at table.
19. Serves self in cafeteria.
20. Eats different types of foods (liquids, crisp foods, slippery foods).

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Self-Help

Skill area: Toileting

Entry skills: Maintains dry diapers or pants for at least two hours, moves bowels one or two times daily at approximately the same time, indicates by gesture, action, vocalization when wet or soiled, sits on toilet when placed and supervised, sits on toilet when placed, unsupervised, uses toilet immediately after being placed.

Sequence steps:

1. Indicates by gesture, vocalization the need to go to the bathroom.
2. Goes to, sits on/stands near toilet independently.
3. Sits, urinates, or moves bowels independently.
4. Tears toilet paper/wipes independently.
5. Flushes toilet independently.
6. Toilet self when necessary, independently, infrequent accidents.
7. Toilets self when necessary, independently, no accidents.
8. Adjusts clothing before leaving bathroom, independently.
9. Washes/dries hands after toileting.
10. Asks location of bathroom in new situations.
11. Obtains help with any toileting problem.

Source:	Pocatello Teacher Survival System, Pocatello, ID VORT Corporation, Palo Alto, CA
Curriculum area:	Self-Help
Skill area:	Grooming

Sequence steps:

1. Washes hands independently; goes to sink when requested; turns water on, adjusts temperature; rubs hands in water; lathers hands with soap; rinses soap off hands; turns water off; dries hands with towel; hangs towel after use, or disposes of paper towel.
2. Washes face independently; goes to sink when requested; turns water on, adjusts temperature; wets face with hands or cloth; lathers face with soap; rinses soap off face with splashing or cloth; dries face with towel.
3. Washes face and hands when dirty or at regular times.
4. Showers self independently; turns on water, adjusts temperature; lifts or pushes shower lever; applies soap to cloth; washes neck area, top and bottom of arms; washes chest, stomach, sides of body; washes genital and crotch area; washes legs and feet, washes back, hips; washes face and ears; rinses off soap after washing; turns water off; uses towel to dry body.
5. Bathes self independently; turns on water, adjusts temperature; inserts/pushes plug; shuts off water at appropriate depth; see above; climbs out of tub; uses towel to dry body; pulls plug; rinses/scrubs tub.

6. Allows hair to be washed.
7. Assists while another washes hair.
8. Bathes or showers when reminded.
9. Bathes or showers regularly without reminding.
10. Brushes own hair.
11. Combs own hair.
12. Allows hair to be cut.
13. Allows hair to be styled (girls).
14. Washes hair independently (in shower); turns on water, adjusts temperature; lifts or pushes shower lever; wets hair (top, back, sides); pushes hair away from eyes; steps away from shower; squeezes shampoo into palm; rubs shampoo onto head; lathers hair (front, sides, back, top); rinses hair; repeats lathering/rinsing; replaces lid on shampoo; repeat shampoo/rinse process with conditioner (optional); turn off water; squeeze excess water from hair; wrap hair/head in towel.
15. Uses deodorant; removes shirt, if necessary; removes deodorant lid/ holds container in one hand; raises opposite hand over head; applies deodorant to underarm; repeats for other underarm; replaces lid; completes getting dressed.
16. Cares for menstruation needs; identifies approximate date of menstrual period; places tampons/pads in accessible location in bathroom; when menstrual flow begins, inserts tampons/applies pads; changes tampons/pads as needed; replaces tampons/ pads as needed; disposes of tampons/ pads appropriately.
17. Cleans glasses as necessary.
18. Blows hair dry; towels hair dry to remove excess water; uses brush/comb to part hair; plugs in hair dryer; turns on dryer/ adjusts temperature; blows hair in desired direction; top of head, sides of head, back of head, shuts off dryer, unplugs; combs/brushes hair in desired direction; checks hair in mirror.
19. Uses curling iron/sets hair in rollers.
20. Manicures nails, cares for nails; cleans nails with file; trims nails with clippers; uses emery board to file rough edges; washes and dries hands; applies nail polish (optional); allows polish to dry; applies hand lotion (optional).
21. Shaves face (using manual razor); gather razor, lather, etc.; turns on water, adjust temperature; wet face with water; put shaving cream/lather on face; rinse hands; stroke face with razor, beginning with side of face; rinse blade; repeat, continuing around face and neck area; rinse razor; rinse face; towel dry; replace blade, if necessary.

22. Shaves face (electric razor); get razor, towel, etc.; plug in razor; apply pre-shaving lotion (optional); stroke face with razor, beginning in center of chin; continue under chin, on sides, and upper lip area; check for "missed spots"; repeat stroking on "missed spots"; unplug razor; clean sink.
23. Shaves underarms/legs (manual razor: tub or shower); place razor on tub edge, side of shower; shower or bathe; lather one leg with soap, rinse hands; stroke leg from ankle upward on calf and thigh as needed; rinse leg; repeat with other leg; lather one armpit, rinse hand; stroke razor from top of armpit toward waist; rinse armpit; repeat with other armpit; clean razor, replacing blade if necessary.
24. Shaves underarms/legs (electric razor); plug in razor, turn razor on; beginning with ankle, shave upward along leg (calf/thigh); repeat with other leg; remove shirt/bra if necessary; stroke razor from top of armpit downward; repeat for other armpit; brush hair away from body with towel; shut off razor, unplug.
25. Makes appointments for haircut.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Self-Help

Skill area: Dressing/Undressing

Sequence steps:

1. Cooperates when being dressed.
2. Cooperates when being undressed.
3. Assists in getting dressed (holds foot out for shoe, etc.).
4. Assists in getting undressed (holds arms up, etc.).
5. Identifies own clothing.
6. Dresses self: puts on socks:
   (a) Pulls sock from heel to ankle after sock is pulled part way by adult.
   (b) Pulls sock up from sole to ankle.
   (c) Pulls sock up from toes to ankle.
   (d) Pulls sock on completely.
7. Undresses self: takes off socks:
   (a) Pulls sock off over toes after adult removes sock to that point.
   (b) Pulls sock off over sole after sock removed to that point.
   (c) Pulls sock off over heel after sock removed to that point.
   (d) Pulls socks off completely.

8. Dresses self: puts on t-shirt/other over-the-head clothing:
   - (a) Pulls garment down over chest after head/arms put in by adult.
   - (b) Puts one arm into sleeve and pulls over chest.
   - (c) Puts both arms into sleeves and pulls over chest.
   - (d) Pulls shirt down over head, puts arms in sleeves, pulls over chest.
   - (e) Places head into neckhole and puts shirt on completely.
9. Undresses self: takes off t-shirt/other over-head clothing:
   - (a) Pulls shirt up over head after adult removes shirt to that point.
   - (b) Pulls t-shirt off of one arm, over head after shirt removed to that point.
   - (c) Pulls shirt off both arms, over head after shirt removed to that point.
   - (d) Pulls shirt off completely.
10. Dresses self: puts on front-opening clothing:
   - (a) Puts hand through armhole of front-opening garment.
   - (b) Locates second armhole and puts arm and hand through it.
   - (c) Pushes arm into second sleeve and pulls clothing up to shoulders.
   - (d) Pulls both sides of front-opening clothing together.
   - (e) Fastens or attempts to fasten front-opened clothing.
   - (f) Tucks in or straightens front-opened clothing.
11. Undresses self: takes off front-opening clothing:
   - (a) Pulls off wrists after adult removes it to that point.
   - (b) Pulls off over forearm after adult removes it to that point.
   - (c) Pulls off over elbow after adult removes it to that point.
   - (d) Pulls off over shoulder after clothing removed to that point.
   - (e) Pulls off over back after clothing removed to that point.
   - (f) Pulls off from other arm after clothing removed to that point.
   - (g) Pulls off completely.
12. Dresses self: puts on pants:
   - (a) Pulls pants up from hips to waist after pulled to that point by adult.
   - (b) Pulls pants up from knees to waist.
   - (c) Pulls pants up from ankles to waist.
   - (d) Pulls pants up completely from floor to waist.
13. Undresses self: takes off pants:
   - (a) Pulls pants off over feet/ankles after removed to that point by adult.

    (b) Pulls pants down from knees and over feet after removed to that point.
    (c) Pulls pants down from hips and over feet after removed to that point.
    (d) Pulls pants down completely from waist and over feet.

14. Dresses self: puts on shoes:
    (a) Puts shoe on over heel after placed near that position by adult.
    (b) Puts shoe on over sole.
    (c) Puts shoe on over toes.
    (d) Puts shoe on completely.
15. Undresses self: takes off shoes:
    (a) Pulls shoe off over toes after removed to that point by adult.
    (b) Pulls shoe off over sole after removed to that point.
    (c) Pulls shoe off over heel after shoe removed to that point.
    (d) Pulls shoes off completely.
16. Dresses self: snaps, zips, buttons closures.
17. Undresses self: unsnaps, unzips, unbuttons closures.
18. Obtains specified clothing items when asked.
19. Dresses self when asked (no shoe tying).
20. Undresses self when asked.
21. Puts shoes on correct feet.
22. Dresses self: ties shoes:
    (a) Partially tightens shoe laces, vertical pull.
    (b) Crosses shoe laces.
    (c) Tightens laces, horizontal pull.
    (d) Ties laces into a knot.
    (e) Makes a bow.
    (f) Tightens bow.
23. Undresses self: unties shoes:
    (a) Pulls at untied lace and takes shoe off.
    (b) Pulls at one lace to untie bow and take shoe off.
24. Dresses self: belts, ties, watches, jewelry.
25. Undresses self: belts, ties, watches, jewelry.
26. Closes fasteners: front, side, back.
27. Unfastens fasteners: front, side, back.
28. Dresses self daily at appropriate time, no reminders.
29. Undresses self daily at appropriate time, no reminders.
30. Selects appropriate clothing for temperature, weather, location, etc.
31. Turns dirty clothes right side out.
32. Hangs clothes on hooks or hangers.
33. Puts dirty clothes in designated place.

34. Polishes shoes.
35. Maintains clean neat appearance throughout the day.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Motor

Skill area: Sensory Perception

Entry skills: Picks up, holds, drops object, picks up object and sticks in mouth, picks up object, bangs against another object or self, picks up object, rubs, pinches, pats, smooths, turns it, picks up object, takes parts off/out/in/on, pushes/pulls object, sits on/in/stands on, in object

Sequence steps:

1. Explores density, resistance, texture, temperature of objects.
2. Matches objects: big, small, long, short, straight, curved, square, round.
3. Matches objects: circular, triangular, rectangular.
4. Matches objects: flat, thin, wide, flat, wet, dry.
5. Matches objects: hard, soft, rough, smooth, wrinkled, bumpy, smooth, sharp, dull, light, heavy.
6. Chooses long, short, straight, curved, square objects from group of distractor objects.
7. Chooses triangular, rectangular, diamond shaped objects from group of distractor objects.
8. Chooses flat, thick, wide, flat, wet, dry, hot, cold, sticky, non-adhesive objects from group of distractor objects.
9. Chooses hard, soft, wrinkled, smooth, sharp, dull, light, heavy objects from group of distractor objects.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Motor

Skill area: Visual Motor

Entry skills: Responds to light when introduced into room, follows moving object with eyes and head, fix-

ates on object momentarily, follows moving object:
(1) on horizontal path from side of body to midline;
(2) on diagonal path from side of body to midline;
(3) on horizontal path from one side of body to the other;
(4) with eyes only, no head movement on path from side to side;
(5) with eyes only until it disappears from view;
(6) in circular path;
(7) along floor ten feet away;
fixates eyes on object/picture for 10 seconds, extends fingers, grasps using both hands, reaches across midline of body, elbow and fingers extended, grasps objects with one hand, moves hands together in unison (clapping), drops objects from grasp/drops, transfers objects from hand to hand, bangs objects together, uses thumb in opposition with all fingers to grasp, uses wrist in side to side movement (rings bell), places index finger in small hole

Sequence steps:

1. Squeezes object in one hand.
2. Grasps using thumb in opposition with two fingers.
3. Picks up small objects between thumb and index finger.
4. Puts objects in/takes out of container with one hand.
5. Builds tower:
   (a) Of five blocks.
   (b) Of nine blocks.
6. Places round objects in round hole.
7. Strings beads.
8. Rolls clay:
   (a) Into snake shape.
   (b) Into ball.
9. Uses wrist in twisting motion to screw/unscrew lids, turn doorknobs, etc.
10. Matches like objects:
    (a) Three primary colors: red, blue, yellow.
    (b) Long, short objects.
    (c) Big, little objects.
    (d) Circles, squares, triangles, diamonds.

11. Puts shapes (circle, square, triangle, diamond) into holes on formboard.
12. Puts together simple puzzles.
13. Manipulates objects to place where desired.
14. Paints with large brush.
15. Folds paper:
    (a) With crease.
    (b) With edges meeting.
16. Cuts paper with scissors:
    (a) Cuts paper following straight, curved lines.
    (b) Cuts out small square, triangle, circle.
17. Threads large needle with wide hole.
18. Pastes:
    (a) Spreads paste on paper, sticks another paper on top.
    (b) Spreads paste on paper, turns over to stick on another paper.
19. Builds five block bridge.
20. Sharpens pencil.
21. Puts key in lock and opens lock.
22. Names six colors.
23. Finds target objects from pictured group of objects.
24. Cuts out picture following outline.
25. Finds two objects in picture and connects them with a line.
26. Identifies like letters, words.
27. Puts together complex puzzles.
28. Strings small beads following pattern.
29. Reproduces number, direction, color or pegboard design.
30. Reproduces previously viewed letters/numbers in correct sequence.
31. Identifies whole object, design when part viewed.
32. Recalls three objects after 10 second exposure.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Motor

Skill area: Gross Motor

Entry skills: Demonstrates head control, shows protective behavior (arm/leg extension), uses voluntary arm/leg thrusts, turns self
(1) from stomach to back,
(2) from back to side,

(3) from back to stomach,
supports self on extended elbows, sits with support, uses arms to raise trunk from stomach position, shifts weight on extended arms to reach, pulls self to sitting, sits independently, rocks back and forth (rocking chair), creeps reciprocally, pulls self to standing position, stands with support, crawls reciprocally, takes simple stepping movement with aid, sits down from standing position, stands alone without aid, stands from sitting/lying position

Sequence steps:

1. Stands:
   - (a) On one foot, holding support.
   - (b) On tiptoe.
   - (c) On one foot, eyes open, arms out.
   - (d) On one foot, eyes closed, arms out.
2. Walks independently:
   - (a) Forward.
   - (b) Backward.
   - (c) Sideways.
   - (d) Up/down incline.
   - (e) 10 feet, pushing/pulling wagon.
   - (f) 20 feet, diameter circle, staying on path.
3. Runs:
   - (a) 10 feet.
   - (b) 25 feet.
4. Pushes/pulls door open/closed.
5. Climbs:
   - (a) Onto chair/wheel toy.
   - (b) Up/down ladder 1 rung at a time.
6. Tosses:
   - (a) Large ball, underhand, both hands.
   - (b) Ball in intended direction.
   - (c) Underhanded, 1 hand.
   - (d) Into air, catches it.
   - (e) Bounces ball on floor, catches it/dribbles.
7. Catches:
   - (a) Large ball thrown from 5 feet.
   - (b) Large ball thrown from 10 feet.
8. Kicks:
   - (a) Large stationary ball without falling.
   - (b) Stationary ball with 2-step approach.

9. Walks up/down stairs:
    - (a) Using rail, both feet each step.
    - (b) Using rail, alternate feet.
    - (c) No rail, alternate feet.
10. Bends/squats:
    - (a) To pick up object without falling.
    - (b) 3 times.
    - (c) Maintaining balance while squatting.
11. Gymnastics:
    - (a) Sideways log roll.
    - (b) Forward roll/somersault.
12. Rides:
    - (a) Scooter.
    - (b) Tricycle.
13. Walks:
    - (a) 10 feet, carrying object which blocks view of floor.
    - (b) Up/down stairs carrying object which blocks view of stairs.
14. Runs:
    - (a) 20 feet.
    - (b) Obstacle course avoiding objects/persons in path.
    - (c) 50 yard dash within 15 seconds.
15. Gallops.
16. Skips, using alternate feet.
17. Hops:
    - (a) 1 foot, 3 foot distance.
    - (b) Each foot 2 times in place.
18. Hangs:
    - (a) From bar, overhand grip, 5 seconds.
    - (b) From laddered bar, and swings across.
    - (c) In chin-up position on bar, 5 seconds.
19. Strikes:
    - (a) With bat a large stationary ball.
    - (b) With hand, large ball thrown from 5 feet.
    - (c) With bat, small ball thrown from 10 feet.
20. Jumps:
    - (a) 6″ rope, feet together.
    - (b) 12″ rope, feet together.
    - (c) Or skips rope independently.
    - (d) Or skips rope turned by others.
21. Kicks ball (using running approach).
22. Rides:
    - (a) Propels, steers wagon.
    - (b) Bike with training wheels.
    - (c) Bike.

23. Catches small ball thrown from 20 feet.
24. Throws small ball 50 feet.
25. Performs exercises:
    - (a) 10 jumping jacks.
    - (b) Stands within 5 seconds after lying on back.
    - (c) Touches toes 10 times in sitting position.
    - (d) Touches toes 10 times in standing position.
    - (e) Does 10 sit-ups.
26. Performs gymnastics stunts:
    - (a) Forward/backward roll.
    - (b) Headstand.
    - (c) Backbend.
    - (d) Cartwheel.

Source:	Pocatello Teacher Survival System, Pocatello, ID VORT Corporation, Palo Alto, CA
Curriculum area:	Motor
Skill area:	Wheelchair
Entry skills:	Lifts head/moves body trunk (roll, slide), grasps objects, releases grasp, sits in prone sitter

Sequence steps:

1. Sits in wheelchair with maximum supports (headrest, chest strap, seat belt).
2. Sits in wheelchair with minimum support (seatbelt).
3. Maneuvers wheelchair in forward, reverse.
4. Stops wheelchair (uses brake or pull motion).
5. Maneuvers wheelchair for right, left and circular turns.
6. Engages, disengages wheelchair brake.
7. Travels in wheelchair through passages (doorways, etc.).
8. Operates wheelchair components efficiently (foot rests, side panels, etc.).
9. Transfers to or from wheelchair:
    - (a) To/from floor.
    - (b) To/from bed.
    - (c) To/from toilet.
    - (d) To/from bathtub.
    - (e) To/from car.
10. Travels in wheelchair in outdoor environments:
    - (a) Across sidewalks/driveways.
    - (b) On inclines and declines.
    - (c) Over curbs.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Motor

Skill area: Ambulation

Sequence steps:

1. Lifts head.
2. Sits:
   (a) With maximum support (head and trunk rests).
   (b) Independently or with minimum supports.
3. Kneels/walks on knees:
   (a) With maximum support (assistance or balance aid).
   (b) Independently, using hands/arms for support.
   (c) Walks on knees with and without support/aid.
4. Stands:
   (a) At parallel bars.
   (b) With another person's support.
   (c) Rises to a standing position from floor/chair to parallel bars.
   (d) Using walker as support.
   (e) Using crutches as support.
5. Walks using parallel bars:
   (a) Uses bars as maximum support.
   (b) Uses bars as minimum support.
6. Walks using rollator/walker.
7. Walks using crutches:
   (a) On flat surface.
   (b) Up/down inclines and stairs.
8. Walks using cane.
9. Walks independently:
   (a) On flat surface.
   (b) Up/down inclines/stairs.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Academics

Skill area: Attendance

Sequence steps:

1. Present at school:
   (a) One of five days.

    (b) Two of five days.
    (c) Three of five days.
    (d) Four of five days.
    (e) Every day of the week.
2. Comes to activity:
    (a) Only after reminders.
    (b) When called once.
3. Goes to school without prompting.
4. Independently comes to activity at specified time.
5. Comes promptly, stays in activity area for specified time.
6. Arrives at scheduled events on time.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Academcs

Skill area: On-Task/Attention

Sequence steps:

1. Attends to easy/familiar task, when supervised:
    (a) 0-30 seconds.
    (b) 30 seconds-1 minute.
    (c) 1-5 minutes.
    (d) 5-15 minutes.
    (e) 15 minutes-half hour.
    (f) Full class period.
2. Attends to easy/familiar task, unsupervised:
    (a) 0-30 seconds.
    (b) 30 seconds-1 minute.
    (c) 1-5 minutes.
    (d) 5-15 minutes.
    (e) 15 minutes-half hour.
    (f) Full class period.
3. Attends to difficult/novel task, when supervised:
    (a) 0-30 seconds.
    (b) 30 seconds-1 minute.
    (c) 1-5 minutes.
    (d) 5-15 minutes.
    (e) 15 minutes-half hour.
    (f) Full class period.
4. Attends to difficult/novel task, when unsupervised:
    (a) 0-30 seconds.

    (b) 30 seconds-1 minute.
    (c) 1-5 minutes.
    (d) 5-15 minutes.
    (e) 15 minutes-half hour.
    (f) Full class period.
5. Works in small group, when supervised:
    (a) 0-30 seconds.
    (b) 30 seconds-1 minute.
    (c) 1-5 minutes.
    (d) 5-15 minutes.
    (e) 15 minutes-half hour.
    (f) Full class period.
6. Works in small group, when unsupervised:
    (a) 0-30 seconds.
    (b) 30 seconds-1 minute.
    (c) 1-5 minutes.
    (d) 5-15 minutes.
    (e) 15 minutes-half hour.
    (f) Full class period.
7. Attends to task for full class period, when supervised.
8. Attends to task for full class period, when unsupervised.
9. Remains at task when distractions are present.
    (a) 0-30 seconds.
    (b) 30 seconds-1 minute.
    (c) 1-5 minutes.
    (d) 5-15 minutes.
    (e) 15 minutes-half hour.
    (f) Full class period.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Academics

Skill area: Task Completion

Sequence steps:
1. Starts task:
    (a) Only with much reminding.
    (b) Before end of period with little reminding.
    (c) Before end of class with no reminding.
    (d) At assigned time with prompting.
    (e) At assigned time independently, no prompting.

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2. Completes 0-10 percent of task:
    (a) With continual reinforcement.
    (b) With some reinforcement.
    (c) With little reinforcement.
    (d) With no reinforcement from adult.
3. Completes 10-25 percent of task:
    (a) With continual reinforcement.
    (b) With some reinforcement.
    (c) With little reinforcement.
    (d) With no reinforcement from adult.
4. Completes 25-50 percent of task:
    (a) With continual reinforcement.
    (b) With some reinforcement.
    (c) With little reinforcement.
    (d) With no reinforcement from adult.
5. Completes 50-75 percent of task:
    (a) With continual reinforcement.
    (b) With some reinforcement.
    (c) With little reinforcement.
    (d) With no reinforcement from adult.
6. Completes 75-100 percent of task:
    (a) With continual reinforcement.
    (b) With some reinforcement.
    (c) With little reinforcement.
    (d) With no reinforcement from adult.
7. Continues to work or seeks help with task when faced with problems.
8. Completes 100 percent of task:
    (a) With continual reinforcement.
    (b) With some reinforcement.
    (c) With little reinforcement.
    (d) With no reinforcement from adult.
9. Determines realistically when task is completed.
10. Completes task in assigned order:
    (a) 0-25 percent of the time.
    (b) 25-50 percent of the time.
    (c) 50-75 percent of the time.
    (d) 75-100 percent of the time.
11. Reviews or checks own work before handing in as complete.
12. Completes 100 percent of task, proofreads/checks to ensure completion.
13. Completes 100 percent of task, proofreads/checks/corrects.
14. Checks work against model.

15. Completes 100 percent of task with corrections, begins new task:
    (a) When reminded.
    (b) Independently.
16. Independently evaluates quality of work, consistent with teacher expectations.

Source:	Pocatello Teacher Survival System, Pocatello, ID VORT Corporation, Palo Alto, CA
Curriculum area:	Communication and Language
Skill area:	Receptive Language
Entry skills:	Responds to startle, turns head to sound source/speaker, responds to sound by smiling/frowning, responds to own name, faces individual who is waving arms for attention, maintains eye contact when spoken to, waves goodbye in response to a goodbye wave, responds to greeting

Sequence steps:

1. Stops activity on simple command (no, stop).
2. Uses yes/no nodding response to answer yes/no questions.
3. Assumes position (sit/stand) when cued.
4. Responds to "sh" gesture by becoming quiet.
5. Initiates activity when cued to "go" or "start".
6. Responds to another's nodding approval by continuing activity.
7. Responds to "leave" or "get away" by moving away.
8. Points to family members, familiar objects, body parts, etc. when asked to do so.
9. Responds to "show me" commands by pointing.
10. Locates orally-requested object with no visual (gestural) cues.
11. Complies with one, two, three-word 1-step commands, with gestures.
12. Complies with 1-step commands, no gestures.
13. Complies with 2-step/related commands.
14. Complies with 2-step/unrelated commands.
15. Complies with 3-step/related and unrelated commands.
16. Follows/complies with group direction (line up).
17. Completes task implied/not specifically stated in command.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area:
Communication and Language

Skill area: Expressive language

Entry skills: Cries/laughs aloud, vocalizes vowel sounds, consonant-vowel sounds, varies intonation in vocalizations, imitates vocalizations.
(1) intonation patterns that sound like sentences,
(2) inflectional patterns,
repeats same syllable (mama)

Sequence steps:

1. Refers to self by name.
2. Names objects:
   (a) Consistent sound combination (gook = cookie).
   (b) Uses real words.
3. Responds to yes/no questions with verbal yes/no.
4. Answers function questions with 1 word utterances:
   (a) With noun (what do you eat with? spoon).
   (b) With adjective (where is the ball? on/under).
   (c) With verb (what is a car for? go).
5. Uses stereotyped phrases (all gone).
6. Uses 2-3 word utterances:
   (a) Article + noun (a dog).
   (b) Possessive + noun (mommy car).
   (c) Adjective + noun (good boy).
   (d) Noun + verb (mommy go).
   (e) Verb or noun + locator (book here).
   (f) Negatives (not go).
   (g) Noun + quantifier (more candy).
   (h) Noun + demonstrator (this car).
7. Uses 2-word verb phrase (boy here, cup broken).
8. Uses 2-word verb utterances:
   (a) Verb with noun (push truck).
   (b) Verb with preposition (go down).
   (c) Verb with noun (truck go).
9. Uses 2-word utterances with locators, prepositions, negatives, conjunctions.
10. Uses noun/verb plurals (cars, jumps).
11. Uses pivot verb "is"/forms kernel sentence (it is a dog).

12. Uses noun phrase + verb phrase/forms kernel sentence (I see a cat).
13. Asks questions:
    (a) Tag questions (let's go, yes?).
    (b) Wh questions.
    (c) Inversion subject-verb (is it time to go?).
14. Spontaneously tells about experience.
15. Uses 3-4 word sentences:
    (a) Prepositions.
    (b) Adjectives.
    (c) Question forms.
    (d) Pronouns.
    (e) Negatives.
16. Uses verb "to be" (I am).
17. Uses adverbs/adjectives in combination.
18. Uses 5+ word sentences.
19. Uses possessive pronouns.
20. Uses subject + verb agreement:
    (a) Person.
    (b) Tense.
21. Uses conjunctions.
22. Uses "to be" as auxiliary verb, 3rd person (is running).
23. Uses quantitative words.
24. Uses pronouns as objects.
25. Uses future tense.
26. Uses past tense:
    (a) Regular.
    (b) Irregular.
27. Uses dependent clauses.
28. Uses irregular plurals.
29. Uses derivational endings (build/builder).
30. Uses comparative/superlative forms.
31. Uses infinitives (to eat).
32. Uses idioms, colloquialisms, figurative speech.
33. Uses slang.
34. Carries on conversation.
35. Tells incident/story.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Communication and Language

Skill area: Articulation

Entry skills: Produces vocal sound on exhalation, blows using a controlled stream of air, places teeth together in biting position (imitation/request), moves tongue past lip-line, places lower lip under upper teeth, partially opens teeth/jaws, tongue placement:
(1) between teeth,
(2) behind upper teeth,
(3) roof of mouth,
maintains closed mouth position except for eating, talking, etc., imitates speech movements without sound production, cries, changing pitch, vocalizes pleasure/pain

Sequence steps:

1. Makes vowel-like sounds.
2. Babbles.
3. Imitates sounds without meaning.
4. Imitates sounds of objects/animals.
5. Uses meaningless syllables as though they were meaningful.
6. Uses one-syllable sound for object/person (wa for water).
7. Uses two-syllable sound for object/person (dada).
8. Says first intelligible, spontaneous word.
9. Articulates vowel sounds in isolation, nonsense syllables, words:
   - (a) Long vowel sounds.
   - (b) Short vowel sounds.
   - (c) Vowel diphthong sounds.
10. Articulates consonant sounds in isolation, words, and in context in initial, medial and final position:
    - (a) /m/ sound.
    - (b) /h/ sound.
    - (c) /w/ sound.
    - (d) /n/ sound.
    - (e) /p/ sound.
    - (f) /f/ sound.
    - (g) /m, h, w, n, p, f/ sounds.
    - (h) /b/ sound.
    - (i) /k/ sound.
    - (j) /g/ sound.
    - (k) /y/ sound.
    - (l) /d/ sound.
    - (m) /t/ sound.
    - (n) /b, k, g, y, d, t/ sounds.

(o) /l/ sound, and l blend sounds (bl, cl, fl . . .).
(p) /r/ sound, and r blend sounds (br, cr, dr . . .).
(q) /j/ sound.
(r) /v/ sound.
(s) /z/ sound.
(t) /s/ sound, and s blend sounds (sc, sl, sm . . .).
(u) /l, r, j, v, z, s/ sounds.
(v) /ch, sh/ sounds.
(w) /th, *th*, wh/ sounds.

11. Articulation of all consonant and vowel sounds in all positions in two and three-syllable words.
12. Articulation of all consonant and vowel sounds in phrases.
13. Articulation of all consonant and vowel sounds in spontaneous speech.

Source:	Pocatello Teacher Survival System, Pocatello, ID
	VORT Corporation, Palo Alto, CA
Curriculum area:	Non-Verbal Communication for Hearing Impaired

Sequence steps:

1. Responds to basic gestures (hi, bye).
2. Gestures basic greetings (hi, bye).
3. Gestures basic needs (eat, drink . . .).
4. Responds to basic signed-gestures (come, sit).
5. Uses sign-gestures to express basic needs (drink toilet).
6. Responds to name when signed.
7. Reads/signs names of family members.
8. Reads/signs familiar objects in home/school environment.
9. Fingerspells letters of the alphabet/numbers.
10. Reads/signs own name, address and phone number.
11. Reads/signs 50 familiar nouns.
12. Reads/signs 50 familiar verbs.
13. Reads/signs directionality cues (here, under . . .).
14. Matches printed letter/finger-spelled letter.
15. Reads/signs numbers 0-100.
16. Reads/signs phrases/kernel sentences.
17. Reads/signs pronouns, possessives.
18. Reads/signs verb tenses (past/future).
19. Reads/signs 5-word sentences.
20. Reads/signs prepositions, articles, conjunctions.
21. Reads/signs prefixes, suffixes, plurals.
22. Reads/signs 2 or more sentences in conversation.

23. Uses all gestural cues/body position etc., to portray meaning.
24. Finger spells basic CVC, CVCE words.
25. Reads/fingerspells 100 basic words.
26. Reads/fingerspells first names of classmates.
27. Given a word sign, fingerspells the word.
28. Reads/signs compound and complex sentences.
29. Reads/signs at conversational pace.
30. Reads an interpreter.
31. Reads interpreter/takes notes.
32. Lipreads/speechreads:
    (a) Consonants.
    (b) Vowel sounds.
    (c) Isolated words.
    (d) Phrases.
    (e) Sentences.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Vocational and Independent Living

Skill area: Pre and Vocational Skills

Sequence steps:
1. Sorts objects.
2. Follows three step verbal command.
3. Completes match-to-sample exercises.
4. Uses elevators/escalators.
5. Uses tools:
    (a) Hammer, nails.
    (b) Saw.
    (c) Screwdriver.
    (d) Wrench.
    (e) Pliers.
    (f) Vise.
6. Assesses own vocational/job related skills.
7. Identifies job area interests.
8. Locates jobs/training opportunities:
    (a) Want ads.
    (b) Employment agencies.
    (c) Social agencies.
9. Identifies skills needed for specific jobs.

10. Determines need for additional training based on job interest and current skills.
11. Demonstrates skill with selected tools/equipment.
12. Obtains social security card/number.
13. Completes job interview:
    (a) Contacts employer, arranges interview.
    (b) Attends interview.
14. Describes consequences of selecting alternative jobs/companies.
15. Describes job-related information:
    (a) Duties/responsibilities.
    (b) Hours.
    (c) Location.
    (d) Employer.
    (e) Pay, pay period, benefits.
16. Uses public transportation to get from home to job.
17. Arrives at work on time, follows work routine (lunch/breaks).
18. Pays for lunches/snacks/transportation, making correct change.
19. Calculates wages.
20. Describes required payroll deductions (tax, social security, etc.).
21. Describes optional payroll deductions (insurance, retirement, etc.).
22. Calculates wages after deductions.
23. Accepts criticism/changes behavior appropriately.
24. Identifies mistakes/errors in work.
25. Corrects/identifies mistakes/errors.
26. Works independently/alone.
27. Maintains tools/cleans tools.
28. Uses appropriate amount of materials/wastes little.
29. Evaluates own performance based on company/supervisor standards.
30. Works steadily/reasonable speed to complete assigned tasks.
31. Determines monthly income.
32. Makes monthly budget.
33. Follows monthly budget.
34. Demonstrates specific skills related to specific occupations:
    (a) Janitorial.
    (b) Keypunch.
    (c) Typing/filing/office clerk.
    (d) Carpentry.

- (e) Plumbing.
- (f) Electrician.
- (g) Delivery.
- (h) Grocery.
- (i) Service station/auto services.
- (j) Home maintenance.
- (k) Construction.
- (l) Gardener/farmer.
- (m) Cafeteria/cook/waitress.
- (n) Cashier.
- (o) Repair work.
- (p) Other occupations of interest.

Source: Pocatello Teacher Survival System, Pocatello, ID
VORT Corporation, Palo Alto, CA

Curriculum area: Vocational and Independent Living

Skill area: Food Management

Sequence steps:

1. Identifies/names food items:
   - (a) Meats.
   - (b) Vegetables.
   - (c) Fruits.
   - (d) Dairy products.
   - (e) Cereal and grain products.
2. Sets table.
3. Clears table.
4. Scrapes, rinses, stacks dirty dishes.
5. Washes dishes.
6. Dries dishes/places dishes in drying rack.
7. Puts away clean dishes.
8. Uses kitchen utensils:
   - (a) Knives.
   - (b) Scraper/spatula.
   - (c) Egg beater.
   - (d) Can opener.
9. Cleans produce.
10. Cuts food into pieces.
11. Peels oranges, eggs, other foods.
12. Grates cheese.
13. Uses kitchen appliances:
    - (a) Can opener.

(b) Mixer.
(c) Blender.
(d) Toaster.
(e) Stove.
(f) Oven.
(g) Dishwasher.

14. Obtains ingredients for recipe (when told).
15. Follows recipe instructions (when explained).
16. Sets oven timer.
17. Regulates heat:
    (a) Burners.
    (b) Oven.
18. Uses pot holders:
    (a) To carry.
    (b) To place food in/take from oven.
19. Follows recipe, prepares one dish.
20. Compiles shopping list from recipe.
21. Compiles shopping list for items missing from home stock.
22. Estimates amount of money required for food on shopping list.
23. Selects needed foods (from list) in grocery store.
24. Pays for groceries, determines change coming.
25. Stores foods appropriately.
26. Describes food spoilage causes and prevention procedures.
27. Identifies 4 basic food groups, sorts food into groups.
28. Plans menu for breakfast, lunch, dinner meals.
29. Prepares, sets table, serves food, cleans up after meal by self.
30. Plans menu for meal, 2-4 persons.
31. Determines portions needed, plans grocery list for planned menu.
32. Prepares and serves single meal for 2-4 persons independently.
33. Plans menu for 2-4 persons for a week.
34. Prepares grocery list for week, from menus, stock on hand, budget allowance.

Source:	Pocatello Teacher Survival System, Pocatello, ID
	VORT Corporation, Palo Alto, CA
Curriculum area:	Vocational and Independent Living
Skill area:	Home Management

Sequence steps:

1. Cleans up clothing/toys upon request.
2. Picks up trash, deposits in trash can.
3. Dusts furniture.
4. Empties wastebaskets, trash.
5. Sweeps floors:
   (a) Broom/dustpan.
   (b) Mop/dustpan.
6. Vacuums.
7. Cleans sinks/toilet with scouring powder, etc.
8. Cleans cupboards, closets, drawers.
9. Picks up clothing/items, sorts in appropriate place.
10. Makes bed.
11. Cleans kitchen appliances:
    (a) Toaster.
    (b) Blender.
    (c) Mixer.
12. Changes bed linen.
13. Cleans and defrosts refrigerator.
14. Cleans stove/oven.
15. Washes and waxes floors.
16. Cleans mirrors and windows.
17. Washes walls.
18. Waters houseplants.
19. Sorts and washes laundry:
    (a) By hand.
    (b) By machine.
20. Dries laundry:
    (a) Hangs to dry.
    (b) By machine.
21. Folds, hangs clean clothing appropriately.
22. Irons:
    (a) Simple flat pieces.
    (b) Blouses, shirts.
    (c) Dresses, other clothing.
23. Mends clothing:
    (a) Sews buttons.
    (b) Sews/stitches tears/rips.
    (c) Places iron-on patches.
24. Describes, identifies cleaning substances/products appropriate for household cleaning jobs.
25. Determines need and arranges for small appliance repair.
26. Does comparative shopping for small appliances.
27. Describes appliance warranty.

28. Acquires place to live:
    (a) Reads want ads/contacts rental agencies.
    (b) Inquires about group homes, etc.
    (c) Lease agreements.
    (d) Rental payments.
    (e) Cleaning/damage deposits.
    (f) Termination of rental agreements.
29. Decorates/maintains apartment/home:
    (a) Hangs drapes.
    (b) Hangs pictures.
    (c) Washes carpet.
    (d) Paints walls.
30. Washes and vacuums car.
31. Waxes car.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Vocational and Independent Living

Skill area: Telephone Skills

Sequence steps:
1. Answers phone/gets person requested.
2. Carries on simple phone conversation.
3. Dials home phone.
4. Dials any given phone number.
5. Uses pay phone, local calls only.
6. Takes phone messages.
7. Uses directory assistance to obtain unknown number.
8. Uses phone book:
    (a) To locate number for familiar/unfamiliar person (white pages).
    (b) To locate number for a business (yellow pages).
9. Orders services/goods by phone.
10. Places long distance calls:
    (a) Station to station, from home phone.
    (b) Station to station, from pay phone.
    (c) Person to person, from home/pay phone.
    (d) Collect from home/pay phone.
11. Obtains/manages/disconnects personal phone:
    (a) Applies for phone installation, makes deposit.
    (b) Notifies phone company of disconnection date.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Vocational and Independent Living

Skill area: Emergencies/Personal Safety/Danger

Sequence steps:

1. Identifies dangerous situation/objects.
2. Avoids/maintains distance from dangerous situations/objects.
3. Identifies danger signals:
   (a) Fire drill bell.
   (b) Poison labels on jars/cans (Mr. Yuck).
   (c) Sirens.
4. Recognizes objects which are dangerous:
   (a) Outlets.
   (b) Sharp objects (knives, etc.).
   (c) Matches.
   (d) Lakes, rivers, open drainage ditches.
5. Avoids danger situations:
   (a) Avoids swing paths, tetherball paths, etc.
   (b) Avoids strangers.
   (c) Avoids strange animals.
   (d) Streets, railroad tracks, etc.
6. Tells/gestures/reports injury/accident to adult.
7. Follows directions in fire/civil defense drill.
8. Handles dangerous objects carefully:
   (a) Sharp objects (knives, etc.).
   (b) Electric cords.
   (c) Matches.
   (d) Carries chair with legs forward.
9. Refuses ride/gifts offered by stranger.
10. Seeks nearest known adult upon advances of stranger.
11. Uses play equipment without endangering others:
    (a) Swings.
    (b) Teeter totters.
    (c) Tether ball.
    (d) Climbing bars.
12. Treats minor injuries (washes/bandages).
13. Operates machinery/demonstrates safety.
14. Avoids known dangerous plants, animals, insects.
15. Follows water safety rules.
16. Tells/demonstrates fire prevention rules.
17. Tells/demonstrates use of fire alarm.

18. Phones doctor/ambulance for assistance/police.
19. Reports fire to fire department.
20. Recites emergency number (911).
21. Extinguishes small fire.
22. Tells/demonstrates use of fire extinguisher.
23. Tells/demonstrates artificial respiration techniques (CPR).
24. Identifies/locates source of gas leak/odor/warns others/ notifies utilities company.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Vocational and Independent Living

Skill area: Mobility/Life Skills for Visually Impaired

Sequence steps:

1. Guide skills:
    (a) Request aid.
    (b) Declines/accepts aid.
    (c) Positions self in relationship to guide.
2. Mobility with guide:
    (a) Synchronizes gait with guide—forward/turns.
    (b) Synchronizes gait with guide—on stairs.
    (c) Opens, passes through doors and passages with guide.
    (d) Moves with guide on escalator.
    (e) Enters/exits from car/bus with guide-assistance.
    (f) Seats self at chair with guide-assistance.
3. Caning skills:
    (a) Folds/unfolds cane.
    (b) Positions cane correctly in hand (outdoor/indoor).
    (c) Uses cane correctly (switches cane from hand to hand as necessary) when moving:
        (1) In a room (with carpet and without carpet).
        (2) Through passageways and on stairs.
        (3) On sidewalks, lawn, driveways, curbs.
        (4) Along fences, bushes, etc.
    (d) Repositions self when disoriented in room.
4. Uses auditory cues for mobility and spacial orientation:
    (a) Crosses crosswalk using auditory cues of traffic.
    (b) Faces in direction of voice when spoken to.
    (c) Identifies and locates sound sources (phone, voice, etc.).
    (d) Uses cues when swimming, bowling and other recreation.
    (e) Follows verbal directions (left, right, north, south) to find destination.

5. Uses public transportation (bus, taxi) efficiently.
6. Identifies placement of foods/drugs/misc. in neighborhood supermarket.
7. Signs name (to checks, etc.) using stylus.
8. Makes and counts change/uses one dollar bills.
9. Marks clothing for identification purposes.
10. Types efficiently and accurately and/or stylus.
11. Identifies and uses sighted person as a reader.
12. Repositions self when disoriented.
13. Uses protective movement (upper body/lower body protection strategies) to move through known and unknown environments.
14. Serves self (table or cafeteria), eats and drinks efficiently using fork, knife, spoon, etc.:
    - (a) Places food correctly on plate.
    - (b) Fills glass appropriately.
    - (c) Uses fork and knife efficiently to locate and cut food.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Vocational and Independent Living

Skill area: Living Skills: Hearing Impaired

Sequence steps:

1. Communication:
    - (a) Uses form of expressive language:
        - (1) Uses sign language fluently.
        - (2) Writes:
            - (a) Uses phrases.
            - (b) Writes sentences, grammatically correct.
        - (3) Verbalizes.
        - (4) Uses total communication.
        - (5) Uses gestures.
    - (b) Has/uses medium for receptive language:
        - (1) Hears using hearing aid.
        - (2) Lip reads.
        - (3) Reads sign language/total communication.
        - (4) Reads notes/letters.
2. Connects visual/assistant aids in home (light over door, flashing alarm clock, etc.).
3. Secures/locates interpreter as needed (classes, meetings, phone calls).

4. Secures state-regulated driving aids for hearing-impaired persons (i.e., right-hand mirror on car).
5. Adjust hearing aid (replaces batteries, seeks repairs/replacements as needed).

Source:	Pocatello Teacher Survival System, Pocatello, ID VORT Corporation, Palo Alto, CA
Curriculum area:	Vocational and Independent Living
Skill area:	Leisure Time

Sequence steps:

1. Draws picture:
    - (a) Simple recognizable forms (man, dog, etc.).
    - (b) Divides picture into different areas (ground, sky, etc.).
    - (c) Scales objects in drawing (by size: larger, smaller, etc.).
    - (d) Expresses movement in drawings.
    - (e) Draws with perspective.
2. Painting:
    - (a) Finger paints.
    - (b) Watercolors/tempera.
    - (c) Oils/acrylics.
    - (d) Pictures.
    - (e) Objects, decorative painting.
    - (f) Paint by numbers.
3. Collages.
4. Molding/modeling:
    - (a) Clay.
    - (b) Soap carving.
    - (c) Wood whittling.
    - (d) Ceramics.
5. Decorative household accessories.
6. God's eyes.
7. Weaving.
8. Crocheting.
9. Knitting.
10. Embroidering.
11. Sewing.
12. Assembles kits.
13. Builds household objects.
14. Refinishes furniture.
15. Bowling.
16. Tennis.

17. Badminton.
18. Team sports (volleyball, basketball, football, softball).
19. Swimming.
20. Skiing.
21. Skating.
22. Boating.
23. Individual games (solitaire, puzzles, etc.).
24. Card games.
25. Leisure reading.
26. Television.
27. Attends movies/plays/concerts.
28. Jigsaw puzzles.

Source:	Pocatello Teacher Survival System, Pocatello, ID VORT Corporation, Palo Alto, CA
Curriculum area:	Social
Skill area:	Self-Identification

Sequence steps:

1. Responds to name when called.
2. Identifies self by first name.
3. Identifies self in mirror/photograph.
4. Points to own body parts:
   (a) Ear, eye, nose, mouth, hair.
   (b) Neck, waist, back, stomach, chest, shoulders, knees, elbow, hips.
   (c) Ankle, heel, fingernail, thigh, calf, wrist, heart, thumb, palm.
   (d) Chin, eyelash, eyebrow, tongue, teeth, lips, forehead, eyelid, cheek.
5. Points to front, back, sides of body.
6. Points to body parts on other person:
   (a) Ear, eye, nose, mouth, hair.
   (b) Neck, waist, back, stomach, chest, shoulders, knees, elbow, hips.
   (c) Ankle, heel, fingernail, thigh, calf, wrist, heart, thumb, palm.
   (d) Chin, eyelash, eyebrow, tongue, teeth, lips, forehead, eyelid, cheek.
7. Identifies own property.
8. Tells own sex.
9. Tells own full name.

10. Tells own age.
11. Names siblings.
12. Categorizes family members by sex.
13. Names friends, relatives, classmates.
14. Tells month of birth.
15. Tells street name, and city in address.
16. Tells father's and mother's full names.
17. Tells parents' employers, place of work, occupation.
18. Tells phone number.
19. Tells month/day of birth.
20. Identifies own right/left hands.
21. Tells hobbies, interests.
22. Tells address (street, number, city, state, zip code).
23. Points to objects in relation to body:
    (a) In front of, behind.
    (b) On right/left side.
24. Locates self in relation to objects:
    (a) In front of, behind.
    (b) On right/left side.
25. Tells birthplace: city, state.
26. Tells birthdate: month, day, year.
27. Uses left/right to direct others in abstract situation.
28. Tells own height/weight.
29. Tells schooling information, job experience.
30. Tells parents' birthplace.
31. Tells/locates driver's license number, social security number.
32. Tells credentials, licenses, training certificates, awards held.
33. Tells references: names, addresses.
34. Discusses own strengths and weaknesses.
35. Discusses own hierarchy of values (honesty, appearance, intelligence, etc.).

Source:	Pocatello Teacher Survival System, Pocatello, ID
	VORT Corporation, Palo Alto, CA
Curriculum area:	Social
Skill area:	Inter-Personal Relations

Sequence steps:
1. Smiles, looks up when another person enters room.
2. Reaches for familiar people.
3. Returns smile when smiled at.

4. Watches others, shows interest.
5. Seeks attention (repeats performances that are laughed at, etc.).
6. Accepts help from others.
7. Plays alone in presence of others.
8. Exchanges items during play.
9. Plays individually with adult.
10. Plays with 1-2 peers.
11. Makes, responds to verbal greetings.
12. Takes turns.
13. Plays cooperatively in group activity.
14. Bargains with other children.
15. Verbalizes feelings to another (without hitting):
    (a) Hits another, makes excuses to teacher when confronted.
    (b) Hits another, makes excuses to third party voluntarily.
    (c) Hits another, afterward verbalizes reasons to the one hit.
    (d) Verbalizes feelings to another, then hits him.
16. Plays group games with loose rules.
17. Plays/works with others, without fighting or quarreling.
18. Plays competitive games:
    (a) Active games (hide and seek, softball, etc.).
    (b) Table games (cards, board games, etc.).
19. Apologizes to others voluntarily.
20. Offers to help others voluntarily.
21. Shares with peers.
22. Comforts peers in distress.
23. Plays games requiring skill, scoring, knowledge of rules.
24. Behaves courteously to peers, adults.
25. Contributes to class discussions and activities voluntarily.
26. Participates in peer group activities when invited.
27. Verbalizes feelings of anger with peers/teacher/others.
28. Uses actions of others as social cues, acts accordingly.
29. Participates in peer group activities voluntarily (clubs, teams, dances).
30. Leads peer group in various play/work activities.
31. Disapproves of offensive peer behavior by ignoring or actively discouraging it.
32. Initiates a compromise to resolve conflict with peer/adult.

Source: Pocatello Teacher Survival System, Pocatello, ID

VORT Corporation, Palo Alto, CA

Curriculum area: Social

Skill area: Social Speech

Sequence steps:

1. Makes and responds to verbal greetings and farewells.
2. Asks for what is desired.
3. Says "thank you," "you're welcome," "please" when appropriate.
4. Hesitates or stops self when interrupting.
5. Says "excuse me" when interrupts.
6. Listens quietly when others are talking.
7. Waits to be acknowledged verbally or by gesture before speaking.
8. Laughs at comments intended to be humorous.
9. Speaks clearly in conversation:
   (a) Uses appropriate volume in different situations.
   (b) Uses appropriate pitch in different situations.
   (c) Uses appropriate speed for the situation.
   (d) Uses appropriate tone in different situations.
   (e) Speaks fluently (without stuttering, stammering, hesitations).
10. Requests food/other items appropriately in public.
11. Participates in class discussions.
12. Maintains appropriate social distance speaking to another.
13. Uses acceptable language (no obscenities, vulgarities) in public.
14. Initiates/pursues topics in conversation consistent with setting.
15. Pauses to allow others to speak.
16. Adjusts responses/actions to type of call at door or on phone.
17. Speaks on one subject long enough to obtain closure.
18. Concludes or accepts conclusion of conversation in polite manner.
19. Intentionally makes appropriate humorous remarks.
20. Makes introductions.
21. Initiates conversation with stranger.
22. Carries conversation among three or more adults.
23. Carries on complex conversation over extended period of time.
24. Participates in class discussion using vocabulary of peer group.
25. Tells story/joke.
26. Gives oral reports.
27. Explains process/concept verbally.
28. Converses with people in various novel situations.

29. Uses appropriate introductory "small talk":
    (a) Asks where other person is from.
    (b) Asks about family of other person.
    (c) Asks about school/job of other person.
    (d) Asks about hobbies/interests of other person.

SETTING AIMS AND CRITERIA FOR SEQUENCE STEPS

I. *How High Is High Enough?*

Once goals are established, and skill sequences determined, you need only establish criteria to use in determining when a student is ready to move to a new skill step.

To determine that criteria, you'll want to consider a number of elements:

- A statement of the *level of performance* you expect, for example:

12/14 —	A raw score criterion
90 percent	A percentage criterion
60 correct 40 errors per minute	A rate criterion

- A statement of the *number of times* you expect the student to demonstrate performance at the specified criterion level, for example:

    Once

    At least two of three consecutive times

    Two times in a row

- A statement of the *degree of assistance/independence* the student is allowed (primarily applicable to programs for severely/profoundly handicapped, physically handicapped, sensory-deficit handicapping conditions), for example:

  With full physical assistance
  With initial physical prompt
  With verbal prompting
  Independently

sph

v

h

As you establish expected levels of performance, you'll want to set criteria which are high enough to facilitate student maintenance of the skill and yet not so high as to "hold" a student on a skill for an unreasonable period of time.

A number of different strategies exist for determining appropriate criterion levels:

1. Take a group of students from a regular classroom, have them do the task(s), and take an average of their performance.

2. Do the task yourself, and ask some fellow teachers to do the task (eight or nine others). List your scores in order, eliminate the highest and lowest scores, and take the middle score of those remaining.

3. Go to the source. For example, if you want information on the expected performance of carpenters shingling a roof, go find some carpenters, and count the number of shingles they complete in a given period of time (this strategy will get you out into the real world, and will please the carpenters).

4. If you have information on an individual student's best past performance, use that as a basis for establishing criterion. For example, if he's read at 75 words per minute previously, aim for at least 75 words per minute.

5. Get criterion levels from existing sources, i.e., special projects, commercial materials, teachers who have had experience, universities, local or state consultants.

For more information on establishing criterion, see Module Eight.

sec/voc

II. *How Soon Is Soon Enough?*

After you've determined the degree of performance you expect students to demonstrate in mastering each sequence step, you'll want to spend some time determining the amount of time each student can afford to spend reaching mastery of each skill step, and still reach the established long term goal by the end of the school year. To do this, you will be setting a target date for each specific skill or objective, taking into account the skill step upon which the student is starting, and the number of steps he or she must master to reach the long term goal. By setting desired dates for expected mastery, you will be estimating the length of time you have to teach, and students have to meet each specific skill. The formula on the following page is included as one procedure you might use to determine target dates. The process is quick, and easy, and yields an estimate for the number of instructional days a student can spend on any one skill step. After you've computed this figure, use your own teaching experience and professional judgment to adjust it until it seems appropriate.

FORMULA FOR COMPUTING AMOUNT OF TIME PER SEQUENCE STEP

$$\frac{\text{Total No. of school days remaining}}{\text{Total No. of steps in sequence}} = \text{No. of days per step}$$

for example:

$$\frac{\text{173 school days remaining}}{\text{29 steps in math sequence}} = \text{6 days per step}$$

Using this estimate, you can estimate target dates for each step on the sequence, beginning by setting the target mastery date for the first step six days following the first day of instruction. Because students will master some steps rapidly, and others only after considerable work, the number of instructional days resulting from the formula should be used only as a guideline. However, as a guideline, the figure is valuable, in that it reminds you that you and your students need to keep moving, if the long term goal is to be reached by the end of the school year.

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Nevada

6

BASIC INSTRUCTIONAL STRATEGIES

Module Six of the *Nevada Teachers' Resource Kit* is a product of
the Nevada Department of Education, Exceptional
Pupil Education, 1978-1979.

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PURPOSE

Teaching has long been identified as the art of passing on critical (and some not so critical) pieces of information—information which, when incorporated into the life of the learner, enriches their life and expands their life opportunities. *Instruction is the heart of teaching.* It is that phase of the teaching process which follows learner identification, screening and placement. It is that crucial event which follows hours of planning and deliberation and culminates in the interaction of teacher with student. It is the apex of the teaching triangle—the ascent of which most teachers have been trained and retrained.

Many educators who use this and other modules of the *NTRK* are already established and excellent teachers. That is, their instruction *does result* in their students' acquisition of new information. For such educators, this module may only serve as a source of written information for others whom they train. For others, it is hoped that ''Basic Instructional Strategies'' will serve to highlight old and sometimes overlooked concepts and strategies. For the teacher new to individualizing classroom instruction, it is hoped that the module will prove to be a fertile source of practical classroom practices.

Lastly, for anyone who reads this module, it is hoped that the material presented will bring you closer to an appreciation of the dynamics of instruction; that it will lead to better teaching and ultimately to better learning. For when students learn what is taught, true *education occurs* as well as instruction.

Enjoy.

ORGANIZATION

"Basic Instructional Strategies" is divided into two major parts. Part One presents an overview of different dimensions of critical instructional elements. These are presented in a number of checks, lists and review formats designed for easy access and use. Included in Part One you will find brief discussions of the importance and practical use of:

- Teaching procedures;
- Lesson elements;
- Instructional preparation;
- Instructional delivery; and
- Student response control.

Part Two is a book within a book. To bring new life to old information, Part Two presents five basic instructional elements which greatly affect instruction. Because most teachers already know how to teach, the information presented in Part Two is intended to HELP YOU TEACH YOUR STUDENTS HOW TO TEACH. Entitled, *"WHAT TO DO? WHAT TO DO! When you have too many students and not enough time,"* it is designed to help you systematically teach your students (or others such as parents, aides, etc.) how to effectively deliver instruction so that it results in learning.

Either separately or together, Parts One and Two should provide you with enough practical information to enable you to individualize instruction not only for those students who "deserve" it, but for those who need it.

PART ONE

This section of "Basic Instructional Strategies" is a collection of key issues related to delivery of instruction. Early in the section your attention will be directed to a list of teaching decisions you must consider in selecting instructional stategies. Review this list very carefully; the decisions it highlights will provide the basis for further discussion in the section. Assess carefully your understanding and use of these procedures and spend some time contemplating their effective use in your classroom.

SELECTING INSTRUCTIONAL STRATEGIES

TEACHING: DECISIONS TO MAKE

Size of group for instruction:
- large group
- 5-8 students
- 3-5 students
- 2-3 students
- 1 student

Deliverer of instruction:
- teacher
- teaching aides
- student teacher
- older students
- peers
- regular classroom teachers
- specialists
- others

Amount/Time of instruction:
- 30-45 minutes
- 20-30 minutes
- 10-20 minutes
- 5-10 minutes

Types of cues:
- individual responses
- group responses
- untimed responses
- timed responses
- single responses
- multiple responses

Types of feedback:
- confirmation of response
- positive reinforcement
- correction procedure

Opportunities for practice and drill:
- routine drill
- novel drill
- practice with peer
- independent practice

TEACHING PROCEDURES

Teaching, or perhaps more precisely, *instructional* procedures, are those events or conditions which occur: (1) when you deliver information, or (2) which immediately follow the information you deliver.

Different teaching or instructional procedures are used by teachers not only to break the monotony that is likely to result from the use of a single method, but as well *because students respond differently to various strategies.* The point is also to be made that certain procedures may be more effective at different moments in the learning heirarchy (acquisition through generalization and transfer). It is important when selecting a teaching procedure, therefore, to know:

- What strategy is most likely to positively affect learning by the student (i.e., to which strategy has the student responded well in the past?); and
- What phase or stage of learning is the student "in?" (i.e., is she or he acquiring new information? Is she or he practicing previously acquired information in the hopes of becoming more fluent? Or is the student practicing the information so that it can be used in different settings or with slightly different cues?).

In the discussion which follows, these two critical questions will be addressed and the instructional procedures used by most teachers to deliver instruction and to follow-up on student response will be briefly covered.

DETERMINING STRATEGIES WHICH MOST POSITIVELY AFFECT YOUR STUDENTS

If you think about it for very long, you will soon come to understand that you respond differently to requests based on how you were initially approached. How students respond to teacher requests is no different. Unfortunately, in our desire to provide information quickly and in great amounts, we all too often forget this very simple reality. If we want students to respond favorably to instructional or any other type of request, we need to approach them with respect and a positive attitude. Talking with your students about strategies to be used in their teaching-learning programs is an excellent way to establish not only terrific rapport but to ensure successful instruction. The only caveat must be that you do not give your students options which you yourself cannot live with.

How do you like to work?

- ☐ Alone
- ☐ With a teacher
- ☐ With another student
- ☐ In a large group
- ☐ In a small group

Where do you like to work?

- ☐ At my desk
- ☐ At a work table
- ☐ At the board
- ☐ At the study area in the back of the room

When do you like to do your most difficult work?

- ☐ 1st thing in the a.m.
- ☐ 2nd thing in the a.m.
- ☐ Just before lunch
- ☐ 2:00 p.m.

What is the most helpful way for me to teach you?

- ☐ In a group
- ☐ In a small group
- ☐ Give you written directions
- ☐ Give you verbal directions
- ☐ Show you how to do the task
- ☐ Have a student show you how to do a task
- ☐ Provide you with plenty of structured drill
- ☐ Provide you with plenty of novel tasks
- ☐ Find workbook pages for you
- ☐ Find library books to help you

When you're having difficulty what is the best way I can help you?

- ☐ Give you the correct answers and show you how I got them
- ☐ Have a student show you how to do the work correctly
- ☐ Give you the answer sheet and check with you in a few minutes
- ☐ Give you extra homework
- ☐ Don't give you such difficult material
- ☐ Don't give you so much of the same difficult material

When you're doing well on a piece of information/skill, what is the best thing I can do for you?

- ☐ Tell you you're doing great
- ☐ Send a note home to your parents
- ☐ Tell the principal
- ☐ Tell your teacher
- ☐ Tell your brother or sister
- ☐ Give you less work tomorrow
- ☐ Give you more work tomorrow
- ☐ Leave you alone
- ☐ Tell my friends in the class
- ☐ Give you a star on a chart
- ☐ Give you a hug
- ☐ Let you pick something nice to do

STAGES OF LEARNING

Many, many educators and psychologists have explored and identified hierarchies which describe *how* we learn. Perhaps one of the most *classroom practical* hierarchies identified in recent years results from the works of Drs. Norris G. Haring and Owen White of the University of Washington. The hierarchy they are currently describing (it is still subject to further research-based foundations) describes stages which begin with the first acquisition of new information and proceeds through using information in different settings or with different cues (transfer and generalization). The stages are described briefly below. On the following pages are a few considerations you will want to take into account when you realize a student is "in" a particular stage.

ACQUISITION

Characterized by no or little knowledge of the desired information, slow response rates with a high number of errors and low number of corrects. (Sample: a student who can't tie his or her shoe is in the acquisition stage of "shoe-tying.")

PROFICIENCY OR FLUENCY

Characterized by knowledge of the desired information (even 100 percent accuracy) *but with slow response patterns.* The function of the proficiency or fluency stage is to learn to do the desired skill not only accurately, but *quickly.*

MAINTENANCE

The ability to recall accurately a piece of previously learned information in the same manner in which it was taught and learned. (Sample: A student can, assuming he or she progressed to the fluency stage, recall learned multiplication tables x3 and x4 with accuracy and within the 2 minute time frame allowed.)

TRANSFER AND GENERALIZATION

Characterized by the student's ability to transfer or generalize a response to a new setting or to similar conditions. (Sample: a student's ability to sort cloth at home as well as in the home economics room or a student's ability to use a rotating door as well as a traditional push-pull door.)

As educators, it is important that you identify the stage of development or achievement you want your students to achieve. Far too many educators purport that their students "are ready for the world (or the next grade)" but have, in reality, done nothing to ensure maintenance, transfer or generalization. By examining your own teaching techniques, you should be able to identify if you are really engaging entirely in strategies which lead to acquisition (and possibly to fluency) only, or if you indeed are teaching and helping students achieve to the final stages of learning.

Here are some "considerations" to help you sort how you are teaching:

Are you asking your students to obtain 100 percent accuracy criterion and then moving them on to the next sequence step or next skill?

If so you are teaching your students to *acquire* information only. They may have other opportunities to practice the information, but unless you ensure that by rapid drill practices, you can't be sure. There is a tendency among teachers, especially those of handicapped students, to move them quickly through information as soon as it has been acquired. This results in a lot of information which is "acquired for a short time" and then is lost. Information which is merely acquired is less likely to lead to maintenance of the information and is less likely to have a positive effect on subsequent steps in the curriculum.

Are you asking your students to demonstrate that they can complete tasks quickly as well as accurately? If your students can tie their shoes but it takes 20 minutes, it really isn't very useful to you or the student. When students and other learners learn to do things quickly, the chances of maintenance are greatly increased. As a teacher, you should ask yourself, "Do I have my students engage in activities which will increase their 'rate' or speed as well as their accuracy?''

If not, you are likely to have patterns where students who once ''knew'' a piece of information no longer can recall what was once learned. To correct this pattern, have your students understand that moving on to a new piece of information is contingent upon accuracy and some speed criterion (within a certain amount of time). You will know when you have reached the ''appropriate'' fluency criteria when your students can recall information with accuracy during maintenance checks. If students are failing maintenance checks, you can be sure they were not fluent on the skill when you took them off of it (or moved them on).

Are you providing periodic maintenance checks on previously learned information? Some skills, because of their sequential nature, automatically review previously taught information, but others don't. Be sensitive to those sequences which have maintence ''built-in'' and those which don't. For those which don't, it will be important that you systematically ask students to recall the previously learned information.

If you're not asking students to take a maintenance check, you need to ask yourself, ''Why not?'' If your answer is that the information that was learned is ''not that important'' then you need to ask yourself *why it was taught in the first place.* Students today have so much to learn, they can little afford to be spending time learning things which they are ''allowed'' to forget.

Are you identifying the skills you teach in light of how and when they are used in the learner's world outside the classroom? And does your instruction continue through on more subtle aspects of using the skill in other social settings?

If not, your students will most likely be able to do the skill just as you have taught them. If you don't teach to generalization and transfer, many students will go without those learning experiences. Then you need to ask yourself again, ''Why did I teach this skill? Isn't it my job to enrich the learner's life in the real world through classroom instruction?'' (Not to be confused with teachers who believe it is their responsibility to provide ''classroom instruction'' only.)

TEACHING PROCEDURES

Are you using a careful balance of:

1. Modeling.
2. Shaping.
3. Drill—routine.
4. Drill—novel.
5. Slicing back.
6. Positive reinforcement: Tangible.
7. Positive reinforcement: Social.
8. Positive reinforcement: Token.
9. Contingency contracting.
10. Ignoring inappropriate behavior.
11. Punishment.
12. Retreat.
13. Time out procedures.

Are you utilizing these teaching procedures? Which ones are you possibly over-using? Which ones would you like to increase in use?

Remember: Variety of instructional procedures will keep both you and your students in a good mood. Remember too, that certain strategies affect performance at certain points in the learning hierarchy more than others.

CONSIDERATIONS FOR INSTRUCTIONAL PROGRAMMING

- Has the student for which you are about to plan a program been adequately assessed?

Do you really have accurate and validated information about the student's *skill* strengths and weaknesses?

- Have goals for the student been set which arose from assessment information and from other persons who are closely involved with the child?

What input did the parents of the child offer?
What input did other support staff in the school offer?
Did you ask the student about the formation of his or her goals?

- What curriculum materials are available in the classroom, in the school and in the district which can be used to teach the student that which she or he needs to learn?
- Where will instruction take place? And for how long? Who else (aides, other students) can help in the actual delivery of instruction?
- What skills can the student engage in using teacher independent tasks and activities?

TEACHING LESSON ELEMENTS

☐ 1. Gain student attention prior to beginning
☐ 2. Inform learner(s) of objectives/tasks
☐ 3. Recall/review of previously presented material
☐ 4. Present new stimulus material
☐ 5. Information presentation and "learning guidance"
☐ 6. Demonstration of appropriate responses
☐ 7. Cue for response (elicit response)
☐ 8. Provide feedback: Reinforcement
☐ 9. Provide feedback: Correction procedure
☐ 10. Provide feedback: Knowledge of response (incorrect items)
☐ 11. Provide opportunities for practice/drill
☐ 12. If in proficiency stage, provide transfer and generalization exercises
☐ 13. Provide closure or summary to lesson
☐ 14. Give directions for next activity

This checklist is enclosed to call your attention to fourteen critical elements of instruction. Whenever you present information to students—whether in a group or individually—you should attend to and use these elements.

FEEDBACK

There may or may not be research evidence to support it, but if you ask teachers what single strategy is most likely to affect the performance of a student, it is probable that they will say, "feedback," or "reinforcement" or "contact with students." Feedback—which includes both positive regard for student academic performance or social behaviors and corrective and informational feedback (error correction)—is crucial; it behooves teachers to pay very careful attention to how, when and how often they provide students with the feedback they need.

First, the purpose of feedback is to provide learners with information about how they are doing. It's your response to their endeavors. You should be providing students in your classroom with daily information about their

- Good social behaviors (helping);
- Bad social behaviors (hitting);
- Good academic behaviors (correct answers); and
- Bad academic behaviors (incorrect answers).

Only when you tell students how they are doing can you really expect them to know.

When you provide information back to students and it leads to the behavior increasing, it means you are reinforcing the behavior. If the behavior is one you want to increase (such as correct responses to math problems or cooperative play) you have *positively reinforced* the behavior. If the information you give students leads to a decrease in the behavior (such as incorrect math answers or hitting) you have *negatively reinforced the behaviors*. Remember, if the behavior decreases, it has been negatively reinforced; if it increases, it has been positively reinforced.

Sometimes teachers think that they are providing positive feedback to students in an effort to increase a desired behavior when in fact, they are doing the opposite. Think.

1. If a teacher asks a student to do some extra drill work to increase correct responses and it leads only to an increase in incorrect responses, what has the teacher done?

Positively reinforced incorrect responses.

2. If a teacher gives a student extra free time for completing work on time and work behavior of the student never changes, what has the teacher done?

Nothing. The extra free time did not prove to be a reinforcer because it did NOT affect performance.

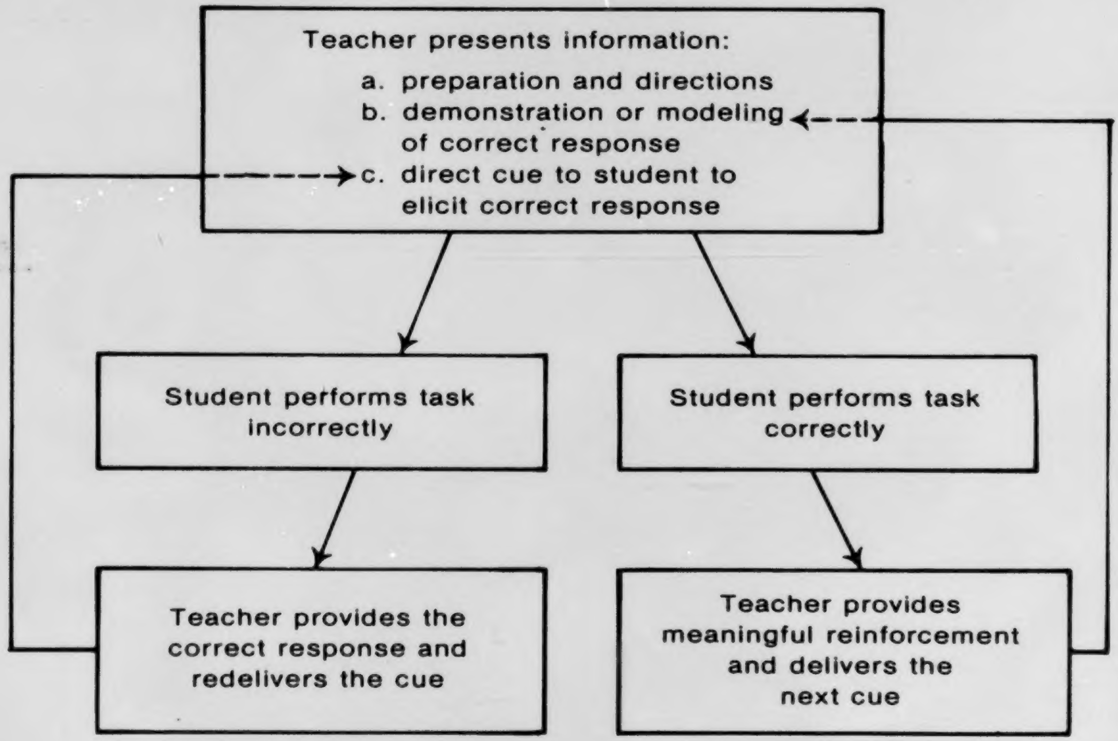
3. If a teacher provides feedback (correctional information about error performance as well as correct performance) immediately after each session for one week and then withdraws to a "leaner" schedule (feedback at the end of the day, for example), what will be the effect on student performance?

Different students will respond in various ways. Some effects might be:

- *NEGATIVE—Student error performance increases or correct responses decrease.*
- *POSITIVE—The student continues to progress in desired directions.*

  or
- *NO EFFECT—Student performance stabilizes and correct and/or error patterns remain the same.*

SIMPLE DELIVERY AND FEEDBACK CYCLE


Teacher presents information:
a. preparation and directions
b. demonstration or modeling of correct response
c. direct cue to student to elicit correct response
Student performs task incorrectly
Student performs task correctly
Teacher provides the correct response and redelivers the cue
Teacher provides meaningful reinforcement and delivers the next cue

LEVELS OF ASSISTANCE

While some less severely handicapped or non-handicapped pupils can elicit desired responses using instructional cues just mentioned, more severely involved students require that teachers "break down" the response pattern if effective instruction is really to take place. This "break down" or "break out" of student response patterns is similar to "slicing" curriculum into smaller and smaller steps. Like "slicing," breaking down the response patterns required enables the student to know *very precisely* what must be done and more importantly, *enables them to make the correct response.*

Levels of assistance most generally identified are:

- Independent;
- Verbal cues;
- Demonstration or modeling;
- Physical prompt; and
- Full physical assistance.

The definition of each term is provided below and on the following page. They are the definitions originated at the University of Washington's Experimental Education Unit, Child Development and Mental Retardation Center.

Independent. A response which is independent is a *response provided by the learner* when the teacher (or CDS, or physical therapist, etc.) simply makes a request such as "close the door" or "brush your teeth." In short, a correct student response to a teacher request.

Verbal cues. Verbal cues are used by teachers (and others) when a simple request is not sufficient to get the student to elicit the correct response. Verbal cues break down the instruction or task so that the learner can complete the request. For example, an independent cue would be, "close the door." A verbal cue to such a task includes "Hold the handle and close the door."

Response patterns should be broken down into *successively more controlled* levels of assistance whenever the student is *consistently* having difficulty providing a correct response to a simple cue.

Demonstration or modeling. Demonstration or modeling requires that the instructor show the student how to perform the task correctly (i.e., "Watch me close the door. Now you do it.").

Physical prompt. When a teacher or therapist or others provide a physical prompt to elicit a response from a student, it means that they actually help the student in some *partial* way complete the task. Using the previous example, a teacher might walk a student to the door, place the student's hand on the knob, release your hand and give the cue, "Close the door, please." The amount of physical prompting needed to complete a task correctly varies a great deal from student to student. In fact, some teachers use more than one physical prompt in a task (i.e., walking the student to the door and putting his hand on the knob). The important thing always is to provide enough direction so that the student can complete the task correctly without "doing it for him."

Full physical assistance. This response pattern requires that the instructor actually complete the entire task *with* the student. It is an extension of the physical prompt to the point of total involvement. Total physical assistance ensures that the task is completed correctly by the student with total teacher help.

Like other levels of assistance, total physical assistance should be discontinued whenever it becomes apparent that the student could complete the response with a less controlling pattern (i.e., a teacher might discontinue total physical assistance and continue the program with physical prompts). The sensitivity of the monitoring procedure you use will play an important role in your ability to judge when it is reasonable to move to a less controlling response pattern.

WHAT TO DO IF YOUR STUDENTS AREN'T . . .
(or are)

Paying attention to your directions.

Build a "pay attention program" which begins with positive consequences for short, simple directions and progresses to more complex situations (i.e., following a day's work schedule).

Don't keep "bull-dozing" ahead. Stop. Slice-back. If your student could pay attention, or had a better understanding of *what he or she considers* to be positive consequences for such behavior, he would.

Do be patient. And do make the progression slight. And do "stay on" one step until you're sure the student is capable of moving on.

Making incorrect responses to work which was previously done correctly.

Provide the student with what he considers to be a reasonable consequence to the behavior. *Also,* check previous work. Did the student really get the answer completed correctly *consistently?* Maybe the student is still in the acquisition stage and needs *more* attention, *more* structure and *more* immediate feedback.

Able to complete the smallest "slice" of your curriculum or sequence with any accuracy or fluency.

Slice the response pattern. If you're currently using a verbal cue to elicit the desired response, try a physical prompt. If that still doesn't work, try a total physical assist.

Giving you clear, concise answers to your request.

Recheck the cueing strategy you are using. Be *direct.* If you want the student to say the letter sound, *don't* hold up a card and say, "What is this?" *Instead* say, "Say the sound of this letter when I point to it." Or, "What's the sound of this letter?"

Also, check to see if the correct response is really in the student's repertoire. Students can't tell you what they don't know. (Always *avoid* begging for an answer such as: "Come on, you knew this yesterday. You know it!" Really, if a student knew the answer and thought it was worth it to say it, he would.

PART TWO

WHAT TO DO?

when you have too many kids and no more time

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INTRODUCTION

There have been a number of research and quasi-research studies in recent years which would have one believe that there is no special knack to teaching someone anything. Perhaps this is true. Perhaps a carpenter could enter from the street into the warm halls of Public School 112 and walk confidently into a sixth grade classroom to teach a math course. Perhaps, after locating the appropriate workbook page she could just as confidently teach the math lesson with as much success as the regularly assigned teacher. But then again, maybe she couldn't.

The authors of this manual happen to believe that instruction is a little more than a "good attitude about kids" and "good luck." We believe that really quality instruction is the result of carefully developed technical and personal skills. That anyone can teach—*if they know how*—the carpenter off the street, the janitor and the kids in your classroom.

This book is a description of one strategy used to train one student to teach another. It is a methodology which was originally developed for a quasi-research study examining the effects of student-to-student instruction versus teacher-to-student instruction. In such studies it was found that students sufficiently trained in basic teaching methodology which includes:

- Training in "self as teacher";
- How to introduce a lesson;
- How to identify errors;
- Drill and corrective practice strategies;
- Informational and corrective feedback; and
- Management.

PREPARATION

EARLY LOGISTICS

Individualization is the art of teaching each student that which she or he needs to learn. It does not necessarily mean teaching each student in a one-teacher to one-student situation. It does mean teaching each student that which she or he is ready to learn in the manner which is most expedient and successful. One-to-one instruction is used a good deal, however, because there are many situations where that is the need, either because of the nature of the skill or the nature of the student.

Because this is so, it is important to know how to provide one-to-one instruction in your classroom. This section of the manual will help you evaluate your needs for one-to-one instructional sessions and provide you with guidelines for initiating a student-to-student teacher training program.

FIRST THINGS FIRST

The information on this page is designed to let you know, before you invest in training your students, what *exactly* is expected of you. It is also designed to help you assess your status on some critical instructional issues and to *plan* an implementation schedule based on the amount of time you have available. The amount of time it takes you to prepare and train your student will, in part, be based on the number of the activities described below already completed.

Expected activites	Minimum time	Planning time
Read this manual	1 hour	
Identify students who have mastered skills taught in your classroom	1 hour	
Identify students who have not mastered skills taught in your classroom *due to lack of individualized instructional opportunities*	1/2 hour	
Prepare and/or duplicate pre-training materials (permission slips, etc.)	1 hour	
Preparing teaching materials for your students *(per skill)*	1/4 hour	
Teaching your "to-be-teachers" how to teach	5 hours	
Monitoring implementation (daily)	1/4 hour	
Time		

EVALUATING AND DECIDING

If you don't try this approach, what will you try?
How much time will another solution take?

ACTIVITIES

Check when completed ☐

- Identification of students who need help ☐
- Identification of the specific skills to be taught ☐
- Permission from parents to participate in program ☐
- Identification of students to act as teachers ☐
- Pairing of teaching students with student learners ☐
- Preparation of materials for each teacher-learner team ☐
  - Identification of a *time* and *place* to conduct the student-teacher training sessions ☐
  - Preparation of student-teacher training materials (Sessions 1-5 in this book) ☐
- Preparation of student-teacher graduation certificates ☐
  - Completion of the teaching-learning team's delivery program (time, place, materials) ☐
  - Identification of student achievement goals for each team and positive consequences ☐

SELECTION OF SKILLS AND LEARNERS

There is an underlying assumption that you make for yourself if you are reading this page: that is, you have some learners in your classroom who are not receiving adequate instruction in one or more specific skills. This page will help you identify:

- Those students who need to be taught;
- The skill which needs to be taught; and
- The appropriateness (or likely success) of an individualized learning opportunity.

Students you think need more instruction (1:1)	Two skills to be taught[1]	Previous 1:1	
		Yes	No

---

[1] BE SPECIFIC! Not reading but comprehension, Bk 4. Not "math" but perhaps, multiplication facts—X 9.

PARENT/GUARDIAN PERMISSION LETTERS
(A good idea)

Students who are "behind" on skills in your classroom and who have not previously had an opportunity to participate in a one-to-one learning opportunity are good candidates for the student-to-student teaching program. Once you have identified who they are, it is often a good idea to ask the parents if they think so also. On the following page is a sample letter for that purpose.

By slightly modifying the form, you can also use it to seek permission of the parents of the student teachers who you want to participate in the program.

Dear :

I am in the process of rearranging my instructional programs so that I can more adequately meet the many and varied needs of students in the class. In the course of this "rearrangement," I have identified several students who I think could benefit from more concentrated one-to-one instruction on specific skills. Becuase it is impossible for me to provide each student with individualized opportunities alone, I am hoping to initiate student-learning teams. I have selected students in the classroom who have already mastered specific skills, have trained them how to deliver effective instruction, drill and feedback and am hoping to pair them with other students as teacher-learner partners.

I have identified your son or daughter as a student who I think might enjoy and benefit by participating in a teaching-learning team. I would like to have .... work with another student approximately .... minutes each day starting on .... I believe this pairing would enable both students to grow personally and academically. With careful monitoring of performance, I will be able to intervene and discontinue the team if it does not seem to be an effective strategy. At that time I would notify you again offering an alternative strategy.

Please take a moment—complete the form below and return it with your son or daughter. I look forward to hearing from you. Please call me at school ( ) between 2:30 and 3:30 if you have any questions or concerns.

Again, thanks very much.

Sincerely,

— —

☐ I would like my daughter/son to receive individualized help in the student-to-student teaching program.

....
Signature of parent/guardian

☐ I would not like my daughter/son to participate.

SELECTION OF STUDENT "TEACHERS"

Believe it or not, there are relatively few criteria for the selection of effective student teachers. But there are a few and you should attend carefully to each one of them:

important

- Mastery of the skill to be taught (accuracy and fluency criteria);
- Willingness on the part of the student to act as a "teacher;" and
- Availability of the student to "teach" and to be trained as a teacher.

Variables which have been addressed by the literature as "important" but which were *not* found by this author to bear on the effectiveness of a student teacher include:

not important

- Age;
- Sex;
- Handicapped vs. non-handicapped;
- Grade; and
- Academic instruction vs. behavior management programs.

There are a number of strategies for selecting "high probability student teachers." The most direct process is to ask potential students if they would like to participate in the program.

> **In all things the supreme excellence is simplicity.**
>
> —*Longfellow*

Once you have identified students who might benefit from a little additional one-to-one instruction and some students who can work with them, the next thing you need to do is prepare some very simple, but effective materials. The materials you pull together (from published or existing files) should have only two specific qualities. They should be:

1. Teacher independent; and
2. Contain not more than 1 specific response pattern.

For your additional pleasure, you might also try to make or modify the materials so that:

1. The directions are simple to read and understand;
2. They can be easily duplicated; and
3. Easily corrected.

Remember, the whole point of training students in the art of teaching is to provide more students with one-to-one instructional opportunities without killing yourself. It is not worth your time if the programs you design demand more of your time than you would spend yourself in a one-to-one instructional session (per day).

TEACHING STUDENTS/ A WORKSHEET

Skills to be taught	Students who have mastered the skill	Students who need the skill

SAMPLES OF SIMPLE WORK PROGRAMS
(say it ten times fast)

I. SKILL: Say letter names or say letter sounds.
DIRECTIONS (written or verbal): Say the sound of each letter or say the name of each letter.

r b z e h p k d s l w

II. SKILL: Multiplication facts, times 3.
DIRECTIONS (written or verbal): Say the answer to each problem or write the anser to each problem.

$$\begin{array}{r}4\\ \times 3\\ \hline\end{array}\qquad\begin{array}{r}6\\ \times 3\\ \hline\end{array}\qquad\begin{array}{r}2\\ \times 3\\ \hline\end{array}\qquad\begin{array}{r}7\\ \times 3\\ \hline\end{array}\qquad\begin{array}{r}8\\ \times 3\\ \hline\end{array}$$

III. SKILL: Decrease hits between 8:30 and 8:45.
DIRECTIONS (written or verbal): Put a mark in the box each time you hit a student. Put a mark in the circle each time you help someone.

☐ ○

SESSION 1

TEACHER TO DOS

- Give the students an overview of the student-to-student program (including training requirements, time, place, etc.).
- Explain individual responsibilities to each student (what they will be teaching, how much time it will take and the consequences of their endeavors).
- Check each student on their current mastery level of the skill they will teach.
- Complete with the student teachers their specific program plan.
- Duplicate diplomas (or a sample for now).

TRAINING SESSION 1: TRAINING STUDENTS TO ACCEPT "TEACHING RESPONSIBILITIES"

PURPOSE: At the end of this session, each student teacher should be able to explain to their friends and parents the purpose of a teaching-learning team, what their role in the program is, who and what they will teach. Looking at their own teaching-learning program form, they should also be able to tell anyone who asks what days they teach, what time and where. The student teacher should also be able to explain the goal to which they will be working with their partner and the consequences of achieving the goal.

TIME: Approximately one-half hour to forty-five minutes per 2 or 3 students.

POINTS TO MAKE WITH YOUR NEWLY APPOINTED STUDENT TEACHERS

TIME:	
:00	Introduction: why you are gathered together (teacher training). An explanation of the student-to-student program (how one student can help another student *if* they know how to teach).
:05	An explanation of the new *faculty meetings* you will be having to train them to be teachers (when and where).
:10	What it means to be a teacher: not one person who knows more than another but one person who knows *different* things and can help someone with a particular *need* (not problem). Perhaps a brief examination of which skills they (the students in the group) still need help on and who *could be* other teachers for them.
:20	An introduction of the students they will be working with and the specific skills.
:25	Brief "mastery of the skill" check for each student.
:35	Completion and discussion of the teacher learner program form.
:45	Explanation of the goals they are trying to work towards with their partner and the positive consequences for each partner in the team.

TEACHER-LEARNER PROGRAM SHEET

TEAM MEMBERS

Student teacher ....

Student learner ....

SKILL

Skill description ....

....

....

Skill goal ....

TIME AND PLACE

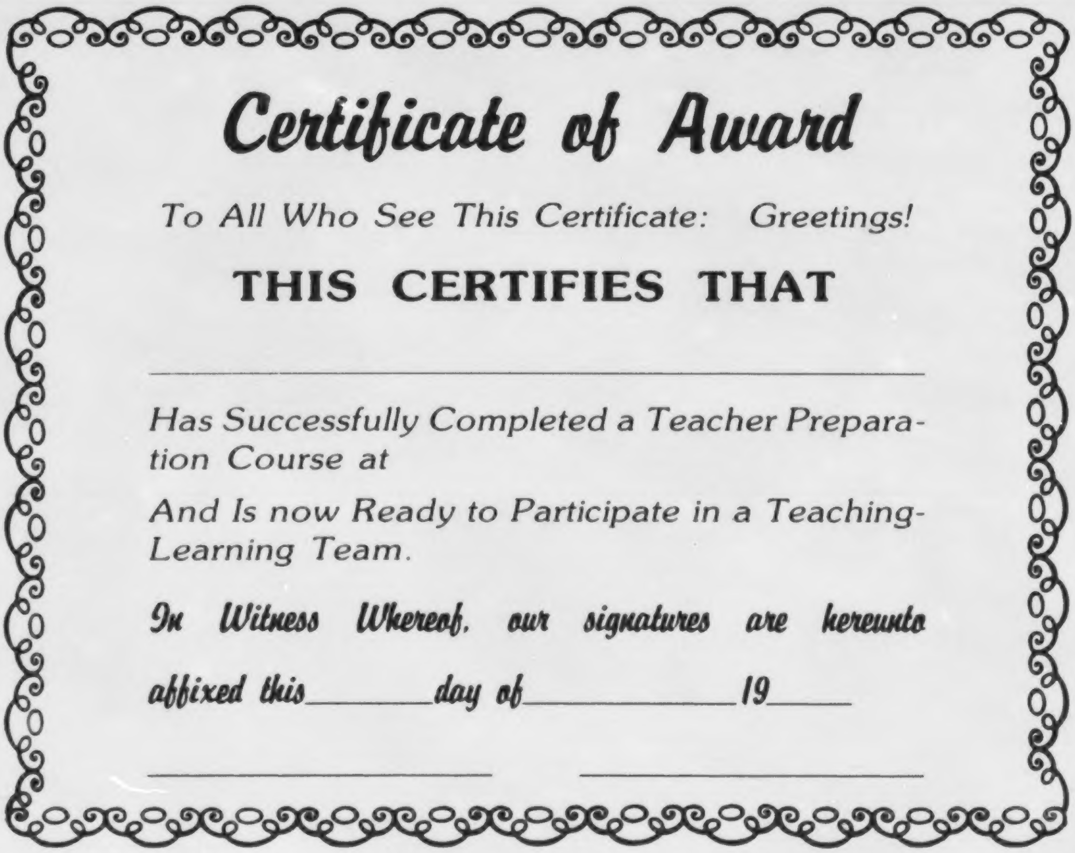
Anticipated beginning date ....

Where to teach ....

What days to teach (circle): M T W Th F

Student teacher: Put a check in this box when your "mastery of the skill" check has been taken ☐.

SAMPLE CERTIFICATE



Certificate of Award

To All Who See This Certificate: Greetings!

THIS CERTIFIES THAT

____

Has Successfully Completed a Teacher Preparation Course at

And Is now Ready to Participate in a Teaching-Learning Team.

In Witness Whereof, our signatures are hereunto affixed this______day of____________19_____

____________________ ____________________

SESSION 2

TEACHER TO DOS

- Explain to each student what she or he will be teaching (specific);
- Provide each student with the materials which she or he will teach;
- Provide each student with a daily drill sheet for the skill he will teach; and
- Instruct each student "teacher" in how to identify and correct errors.

TRAINING SESSION 2: TRAINING STUDENTS TO IDENTIFY SPECIFIC LEARNING NEEDS: ERROR ANALYSIS

PURPOSE: At the end of this session, each student teacher should be able to explain to you why it is important to instruct to specific errors, how to identify them and how to instruct to them. Looking at the materials you will have provided them, each student should be able to accurately tell you what types of behavior will constitute an error reponse and which behaviors may be counted as correct responses.

TIME: Approximately one-half hour to forty-five minutes per 2 or 3 students.

POINTS TO MAKE

TIME:

:00 Meet and greet the students. Review briefly yesterday's discussion of what it means to teach someone. Review briefly their teaching assignments.

:05 Distribute to each student those materials they will use with their "learning" partner. Tell them to put them (when you finish this session) in a safe spot (you can be specific). After everyone has the right materials, begin a discussion which is content-specific to the subjects they will teach (i.e., reading phrases from the basal reader). Explain to them that we all make errors—and all of us different kinds of errors. The students they will work with will make errors also and it is their job to give them the right answers. Explain the types of errors that can be made according to the materials you've passed out.

:25 Spend about 10 minutes discussing *very direct* strategies for correcting errors (see next page). Demonstrate and practice.

:35 Conclude the session with a summary of the day's activities and a reminder to carefully store materials.

LOOKING FOR ERRORS

- What can be considered a "wrong" response or *learning opportunity?*
    - A word misread?
    - An entire phrase misread?
    - A pause?
    - A wrong response followed by a self-correction?
- Are there *specific error* (saw for was) or *specific error patterns* (all addition problems with carrying)?
    - Should you work on all of them at once?
    - How many are there?

CORRECTING ERRORS

DON'TS

- Don't keep asking "What is this?" If the learner knew the answer she or he wouldn't keep making an error response.
- Don't coach or prod: "Come on, you did this yesterday."
- Don't give insufficient directions (i.e., pointing to a yellow card with the letter /A/, don't say, "What is this?" The learner is likely to say, "Why, it's a yellow card!" And she or he will be absolutely correct!

DO

- Do tell the learner the correct response immediately and ask them to repeat it after you.
- Give specific directions to begin with: "Say the name of this letter" /A/.

LEARNING OPPORTUNITIES WORKSHEET

THIS SHEET CONTAINS OPPORTUNITIES TO LEARN FOR

....

SPECIFIC LEARNING OPPORTUNITIES

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SESSION 3

TEACHER TO DOS

- Provide an overview of the session by talking about different ways students learn and different ways teachers teach.
- Demonstrate how to ask for a specific response and how to identify an error (review).
- Explain the importance of drill toward specific errors or learning opportunities.
- Provide an opportunity for each student teacher to practice delivering a piece of material, watching or listening for correct and error responses and how to deliver appropriate and sufficent drill.

TRAINING SESSION 3: TRAINING STUDENTS TO DELIVER EFFECTIVE INSTRUCTION: TEACHING TO ERRORS THROUGH SPECIFIC DRILL

PURPOSE: At the end of this session, each student teacher should be able to explain to you how to introduce a lesson, how to set the goal for the lesson (today we will . . .), how to teach to a specific learning opportunity (or error), how to correct the error and how to foster adequate and appropriate drill. During the session, each student teacher should have been given ample opportunities to demonstrate his or her mastery of these concepts with time from you for encouragement, correction (if necessary) and motivation to keep going.

TIME: Approximately forty-five minutes to one hour, depending on the amount of practice, demonstration each student needs or can handle (for approximately 2 or 3 students).

POINTS TO MAKE

TIME:

:00 Briefly review yesterday's (or previous session's) content. Answer any questions. Set the stage for this session by explaining to each student what you hope to accomplish (see purpose above).

:05 Spend about 5 minutes explaining to your students the importance of making the learner comfortable when you start a lesson. Explain to them that certain things they do (like having the materials ready to use, etc.) can help make the session run smoothly. Next, explain to them why it is important to tell the learner what you hope to accomplish by the end of the lesson (goal setting).

:10 The heart of the lesson: how to deliver effective instruction. Using the content appropriate to each student-teacher and his or her partner, demonstrate at least one way in which the lesson can be introduced and set-up for optimal practice opportunities. Let each student demonstrate and practice the delivery strategy you design.

:30 Introduce the specific drill sheets you have prepared for each teaching-learning team. If possible, tell each teacher how she or he can duplicate the materials when they need more.

:40 Pair the students in the session and let them run through an entire teaching session including:

- Selecting the materials to be used.
- Telling the learner where and when to meet.
- Introducing the lesson.
- Setting the lesson goal.
- Identifying errors or learning opportunities.
- Practicing toward the errors.

WHEN YOU DEMONSTRATE A SKILL . . .

- Be specific! ! ! ! !
- Demonstrate, clearly, only one correct response at a time and wait for a learner response after each demonstration!
- Never move on to a new skill or item until the learner has demonstrated the skill to you correctly!

AFTER YOU HAVE DEMONSTRATED A SKILL . . .

- Go back with the learner at least three times to repeat each learning opportunity (to make sure it's correct) before you move on to more material.
- Practice. And practice some more.

REGARDING THE THREE TIMES IS GOOD ENOUGH DRILL SHEET

In each of the four boxes on the sheet, enter *specific errors* to be practiced or specific *page numbers* of worksheets (or workbooks or basal readers) to work on during the session.

THE THREE TIMES IS GOOD ENOUGH DRILL SHEET

FOR
THE STUDENT-LEARNING TEAM
OF

&

CHECK ONE: Write ☐ Read ☐
Say ☐ Think ☐ Draw ☐

Each of the following 3 times

SESSION 4

TEACHER TO DOS

- Provide your students with a complete but simple understanding of the importance of sufficient positive feedback as well as informational (or corrective) feedback.
- Demonstrate a sample lesson without any feedback from the "teacher."
- Demonstrate a sample lesson in which adequate feedback is given.
- Solicit feelings from your students about how they feel when someone tells them "you're doing great!"

TRAINING SESSION 4: TRAINING STUDENTS TO DELIVER SUFFICIENT POSITIVE AND INFORMATIONAL FEEDBACK

PURPOSE: At the end of this session, each student teacher should be able to tell you why it is important to tell a learner when she or he is working well or progressing well. And, why it is important to deliver feedback which gives the learner information about the types of responses he or she is making (both correct and error).

(Session four and session three can be closely interrelated. In the previous teaching session you taught your students how to deliver effective instruction and how to demonstrate a skill. In a sense, the strategies employed to teach are the same kind of strategies employed to inform: *directness and specificity*, and *frequency.)*

TIME: Approximately 30 to 45 minutes per 2 or 3 students.

POINTS TO MAKE

TIME:

:00 Explain to your students that this lesson is designed to give them an understanding of the *importance* of telling learners how well they're doing—both in terms of encouragement and information. Receive any unanswered questions from previous sessions.

:05 Demonstrate a 1-minute lesson where you do not give the learner any corrective, informational or positive feedback—don't even smile. Ask the students how the learner did. Chances are they won't know.

:10 Demonstrate a 1-minute lesson where you do give both positive and informational feedback. Now ask your students how the learner did.

:15 Spend this time discussing ways in which the students in the group can give informational and supportive feedback to the students they will teach. After that's done, spend a few minutes on how important it is to deliver feedback frequently.

:25 Close the session with a brief recap of everything which has been learned to date.

FEEDBACK
FEEDBACK
FEEDBACK
FEEDBACK

I. What kinds of feedback can I give my learner?

II. When will I give feedback?
Throughout the lesson? Yes!

Use the space below to count the number of times you praise the learner with whom you work:

Session One:

Session Two:

Session Three:

Session Four:

Session Five:

SESSION 5

TEACHER TO DOS

- Provide each student with some specific guidelines for managing behavior: guidelines for increasing appropriate behavior and guidelines for decreasing inappropriate behaviors.
- Review the previous four lessons. Call for a final demonstration of a session program: from the introduction of a lesson, through the identification of errors, drill strategies to delivering feedback.
- Graduate those students who can successfully demonstrate their assigned lessons. Distribute diplomas.

TRAINING SESSION 5: TRAINING STUDENTS TO MANAGE APPROPRIATE AND INAPPROPRIATE BEHAVIORS

FINAL REVIEW OF SKILLS—GRADUATION

PURPOSE: At the end of this session, each student teacher should be able to explain to you how to get "his learner" to increase his or her good behaviors and how to decrease inappropriate behaviors. The session is also designed to act as a synthesis of the preceding four lessons which, for those students who can successfully deliver their lessons, ends with graduation and the acceptence of their "teaching diplomas."

TIME: Approximately thirty to sixty minutes, depending on how elaborate you care to make the ceremony.

POINTS TO MAKE

TIME:

:00 Explain to students the activities of the session (1-2-3). Receive any last minute questions or concerns.

:05 Discussion on how to build appropriate behaviors. Give you students a brief understanding of the principle of *positive reinforcement*. That is, simply, when we do something good, and somebody else notices and says something to us about our good behavior, we are likely to do it again. Include some comments on how it is very important to be direct and specific about the kinds of positive reinforcement we give one another (i.e., not: "That's good" but rather: "That sure is a clear /N/).

:15 Discussion on how to discourage inappropriate behaviors. During this portion, give your student teachers a brief understanding of the concept of *ignoring*. Explain to them if they pay attention to bad behaviors and say something about them, they will increase just as if they were good behaviors! Practice ignoring someone in the group. It's hard but it can be done. Explain that the behavior being ignored may increase at first (the person will want your attention) but that if you continue, it will probably go away. Besides, remind them that every person does enough good things to attend to: Pay attention to the good things that are going on!!

:30 Final review and graduation.

AND THAT'S THE END
OF
WHAT TO DO?

Thank you very nicely.

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Additional Readings

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BEHAVIOR MANAGEMENT

Module Seven of the *Nevada Teachers' Resource Kit* is a product of the Nevada Department of Education, Exceptional Pupil Education, 1978.

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PURPOSE

> All culture and intellectual life has two functions. One is to give certainty and encouragement to the many, to comfort them, and to give meaning to their lives. The second is more mysterious and no less important: to enable the few, the great minds of tomorrow and the day after, to mature, to shelter and care for their beginnings, to give them air to breathe.
>
> —*Herman Hesse*

There are educators who take the management of behavior lightly. These people quote adages such as "Don't smile until Christmas" and insist that they will never bribe their students with free time or chips. Still others contend that children and other learners must learn to "be good" simply because it's the *right* thing to do.

But the management of behavior is not so easy. Nor is it funny. The ability to control and guide inappropriate and appropriate student behaviors is a critical dimension of effective teaching. It means that you establish and consistently teach by standards which allow your students to grow maximally. Sometimes it means designing special programs for students who elicit inappropriate behaviors which interfere with learning; more than not, it means establishing and commanding an environment where learners know what to do and how to do it within the greatest range of freedom.

Behavior management is a serious responsibility. It requires technical skills which may or may not come with a teaching certificate. And it means always trying and always believing there does exist a solution for every problem. This module, Module Seven of the *NTRK*, is presented to educators who want to keep trying.

ORGANIZATION

Managing behaviors means establishing an environment in which students can grow both academically and socially. It means setting standards in your classroom which maintain, enhance and, occasionally, eliminate specific behaviors.

The management of academic and social behaviors is important because it allows you to help students gain new skills, to be accepted by a wider range of friends and to experience success which is not possible to the learner with interfering, inappropriate behaviors. And while it is so important, it is not an easy task. The effective implementation of group and/or individual behavior plans requires that you know how to:

1. Define expected behaviors;
2. Target behaviors occurring which you would like to enhance or increase;
3. Target behaviors occurring which you would like to maintain;
4. Target behaviors occurring which you would like to decrease or eliminate;
5. Coordinate a behavior management program design with other interested parties;
6. Establish behavior goals;
7. Monitor progress toward goals; and
8. Redesign an ineffective plan or make program interventions (changes) when the behavior does not change in the desired direction.

In order to cover each of these points, this module is organized into three sections:

Section 1 Pre-program activities/Targeting behaviors

Section 2 Program designs and program implementation

Section 3 Monitoring program effectiveness

TERMINOLOGY

Reinforcement:	An event or condition which causes an INCREASE in behavior.
	Positive Reinforcement: An event or condition which causes behavior to INCREASE because the learner *seeks* the reinforcement.
	Negative Reinforcement: An event or condition which causes behavior to INCREASE because the learner *seeks to avoid* the reinforcement (i.e., nagging).
Punishment:	An event or condition which causes a DECREASE in behavior.
Ignoring:	Lack of attention to a specified behavior/the absence of reinforcement or punishment.
Consequence:	An event or condition which occurs immediately or shortly after a behavior is elicited.
Antecedent:	An event or condition which occurs immediately or shortly before a behavior is elicited.

PART ONE/PLANNING

Before you can design and implement a behavior management program *which will be beneficial to an individual student or to a group of students*, it is important that you engage in a few pre-planning or pre-program activities.

ESTABLISH CLASSROOM EXPECTATIONS

It is of primary importance that you specifically identify and list those procedures, behaviors or rules which you expect students in your room to follow. Listing rules automatically defines expected (and not expected) classroom behaviors for all students at all times. When listing behaviors, be sure that you include those behaviors which SHOULD OCCUR as well as those which you will not allow. Once the rules are listed, tell your students the *consequences* for following the rules as well as not following the rules.

Once you've established the rules, list them and post them so that they are visible to your students, to other visiting teachers, to aides, parents, etc. Be sure the language and reading level of the rules is appropriate for the students who enter and leave your room.

Examples of classroom rules include:

1. Work quietly at the round group/work table.
2. Work silently (no talking) at your desk.
3. Say "please" and "thank you" when asking for or receiving materials.
4. Enter the room quietly.
5. Pick up your work folder *before* you go to your desk.
6. Raise your hand if you have a question or need help.
7. Return materials to their proper place.

Periodically you will serve students whose behavior is so deviant from your class rules that it would be an impossible expectation to ask the student to follow them. For students who display excessive inappropriate behaviors, it is necessary that you specify a few rules for this student—which may vary from the expected behaviors of the majority of your students. At times, it may also be necessary to impose *different or more stringent contingencies* on certain students. When it is necessary, do so. *If you explain* the "special rules" for Michael to the rest of the class, they will more than likely be supportive. Don't be afraid to deviate for certain students Children are really very accepting.

THE CLASS RULES

SPECIAL RULES FOR

ETHICAL CONSIDERATIONS

Any time anyone identifies rules for another, that person is responsible for justifying their expectations to the person affected by the rules or to a person caring for a person affected by the rules.

Because the effective management of classroom behaviors involves *explicit* and *planned* monitoring of behaviors it is important that teachers clearly understand their responsibility—their ethical responsibility—to their students and to the parents and guardians of their students. Teachers must be able to change behavior. The entire learning process of American education is founded upon the principles of academic growth—of academic change. Likewise, it is founded upon principles of growth in physical development, emotional development and social development. But teachers must know why they seek change. And they must be able to explain why they seek change as they do.

In the process of working with exceptional students, many special educators are devoted to obtaining more than one year's growth for one year's instruction. Without that expectation, many special educators would only be maintaining a handicapping gap instead of narrowing it. But in seeking rapid or accelerated growth (change) many special educators come under attack for "manipulating," "bribing" and/or infringing on the individual rights of students. And while under attack, educators must be able to explain to others why they do what they do.

More than not educators plan behavior management programs so that students have opportunities to grow. Without imposing consequences on a seven-year old "biter" other children in the classroom would be threatened by the child and actually, less free. Without imposing consequences on a child who self-mutilates, the child would continue to do so thereby cutting off any new learning opportunities for new behaviors. Like programs in many regular classrooms behavior management programs developed by special educators are designed to increase freedoms, not limit them.

The ethical consideration guidelines on this page should help focus your attention on identifying behaviors and consequences. Hopefully they will prove beneficial to you in planning for and designing behavior management programs with your students, with other teachers and parents.

ETHICAL CONSIDERATION GUIDELINE

Is the behavior you seek to build or eliminate of mutual concern to other parties?

In consulting with parents, the student and/or other teachers, does the behavior you seek to eliminate or build seem important? Do they agree that the time spent is worth the benefit to the student? Is it a "priority" in their minds or are there other behaviors which, to them, seem more critical?

Does the behavior you seek to build or eliminate hold significant value for the learner involved?

Is the behavior you seek to build or eliminate going to enhance the life of the student either academically, socially or emotionally? Is the new behavior, or lack of an inappropriate behavior, something the student is likely to value?

In building a new behavior or in eliminating an undesirable behavior, does your change plan include the use of positive reinforcement as opposed to punishment? Does it avoid the use of negative reinforcement?

Many undesirable behaviors can be eliminated through the use of punishment. And many desirable behaviors can be maintained or built through such irritating negative reinforcement cycles as nagging or loud buzzers (your seat belt, for example). But when it is possible to do so, it is far more favorable to build behaviors through the use of positive consequences (smiles, praise, holding a child,

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etc.). It is even possible to eliminate undesired behaviors by ignoring them when they occur and focusing, instead, on the nearest appropriate or desired behavior (for example, working quietly as opposed to talking-out or walking instead of running).

In identifying behaviors to change, have you talked with your student or his guardian about the behavior and the desired direction of change?

It is grossly unfair and unethical to plan to change anyone's behavior without making the change known to the person. Even with very, very young learners or with severely handicapped students, it is important that you tell—or attempt to tell—the student of the behavior that you desire. You'll be surprised. Sometimes just telling a student exactly what you want is enough to cause the desired change!

A QUICK REVIEW

	Yes	No
1. Is the behavior you seek to build or eliminate of mutual concern to other parties?	☐	☐
2. Does the behavior you seek to build or eliminate hold significant value for the learner involved?	☐	☐
3. In building a new behavior or in eliminating an undesirable behavior, does your change plan include the use of positive reinforcement as opposed to punishment?	☐	☐
4. Does it avoid the use of negative reinforcement?	☐	☐
5. In identifying behaviors to change, have you talked first with your student or his guardian about the behavior and the desired direction of change?	☐	☐

TARGET THE BEHAVIOR

Before you can change behavior you need to know what exactly it is you seek to change. *Specifically* identifying behaviors to be maintained, built or eliminated is usually called "targeting the behavior." The term is used because it implies that someone has not only "identified" the behavior but has identified in very exact and observable terms. The table below may give you some idea of the difference between "identified" and "targeted behaviors." As teachers and professionals concerned with helping students obtain new skills, it is much easier to deal with targeted behaviors than identified ones.

"Identified" behaviors	*Targeted behaviors*
• Poor self-image	• Negative statements about self
• Poor attitude about school	• Number of assignments turned in or not turned in Number of days absent from school
• Lazy	• Number of minutes off-task Number of assignments not completed on time
• Inadequate mobility	• Number of steps taken across the room
• Can't talk	• Number of communication initiations or responses to questions.

COUNT THE TARGETED BEHAVIOR

Once you've properly targeted a behavior, the next step is to count it during the time or times you think the behavior is occurring most frequently. Counting behaviors will verify your "feelings" that indeed, Brendon Patrick is talking-out more than the other children. Or perhaps, that he's not talking-out as much as you thought. Counting also puts behaviors in perspective: it indicates to you the frequency of Brendon's behavior against a peer. You may find that others talk-out just as much, but B. P. talks out louder than anyone. In that case, you don't need to develop a plan to stop Brendon's comments; you need to develop a plan to get him to speak in a more acceptable tone.

Counting behaviors can be as simple or as complex as you want to make them. Methods of counting are discussed in Module Eight of the *NTRK* but the few guidelines below may help to get you started:

1. Identify the time or times during the day when you believe the behavior to occur most frequently;
2. Establish a set time (1 minute, 10 minutes, 30 minutes, the entire school day) to count the behavior;
3. Record your behavior count on a behavior count record sheet;
4. Count the behavior on at least three different days or on three separate occasions (except in the case of severe danger to others or to oneself);
5. Count the behavior consistently (decide beforehand what will be counted as a talk-out: identify the starting point and ending point of each behavior).

BEHAVIOR COUNT

Student:

Targeted Behavior:

Time of Day to Count the Behavior:

Length of Count (From/To):

Session	Student of Concern	Peer
1		
2		
3		
4		
5		
6		

OBSERVE FOR SIGNIFICANT ANTECEDENT OR CONSEQUENT EVENTS

The final "planning activity" in designing a behavior management plan is to spend some time observing for behaviors which occur immediately or shortly before the targeting behavior occurs and those which occur immediately or shortly thereafter (antecedent and consequent events, respectively).

Looking for antecedent (or before) events focuses your attention upon conditions or events which precede the behavior and may in fact, cause the behavior you have targeted. For example, you may notice in looking for "significant antecedent events" that each time Brendon Patrick talks-out it's because Denise has just poked him in the back with her pencil.

Likewise, careful observation or acknowledgment of significant consequent events may prove to be very helpful. Consequent events—or those events or conditions which occur immediately or shortly after a behavior occurs—are often responsible for maintaining or building behaviors. Frequently in observing consequent events you will find that you—or even one of your students—maintains an undesired behavior because each time it occurs, you or someone responds with a little attention.

Accounting for antecedent and consequent events which are significant—which may, in fact, cause the behavior—is extremely important. Awareness of these factors sometimes eliminates the need to develop a highly specific or complex behavior management plan.

BEHAVIOR TARGETING FORM

Name of student..

Three behaviors which are of greatest concern:

1. ....

2. ....

3. ....

Which behavior occurs most frequently?..

When does the behavior occur?..

....

What happens immediately BEFORE the behavior occurs?..........................

....

What happens immediately AFTER the behavior occurs?..........................

....

Is the behavior of concern also of concern to others? Who?......................

....

Is this person or these persons willing to devote some time and attention to the behavior in a cooperative program with you?..................

....

Take a count of the number of times the behavior of greatest mutual concern occurs:............within a 10 minute sample/............within a half-hour sample/............throughout the school day:..........................

If you are trying to decrease an inappropriate behavior, identify an appropriate, incompatible behavior:..

PART 1 REVIEW

1. Define the following terms:

"Targeted behavior":

Consequent event:

Reinforcement:

Negative reinforcement:

2. When deciding to establish a behavior management plan, list three ethical considerations which are of concern to you:

3. Give two reasons for listing classroom rules in your room:

4. If spanking results in an increase of an undesired behavior, is it considered (a) punishment; (b) positive reinforcement; or (c) negative reinforcement?

Question 4: Answer: positive reinforcement because it caused an increase in behavior due to something which was added, not avoided.

PART TWO/ IMPLEMENTING

Obviously once you've verified and considered the importance of building, maintaining or eliminating a behavior, the next step is do something about it. Fortunately for all those concerned with behavior change, a number of "principles" have been identified. Most commonly, this set of behavior patterns is known as the "principles of behavior." It is from these principles that educators and others concerned with behavior derive the foundation of behavior change programs. They become the starting points in the initial design of behavior change programs.

The principles of behavior which are most regularly utilized by classroom instructors included the following guidelines for maintaining, building and eliminating behaviors.

BUILDING NEW BEHAVIORS

- New behaviors increase once the learner knows what is expected;
- New behaviors increase when there is some consequence for performing the new behavior;
- New behaviors, like all behaviors, increase in frequency when attention is given to them;
- New behaviors must be reinforced each time the behavior occurs and should occur immediately following the behavior.

ELIMINATING OR DECREASING UNDESIRED BEHAVIORS

- Behaviors which are CONSISTENTLY ignored will eventually decrease in frequency and may be totally eliminated:
- Behaviors which are punished will tend to decrease or cease in a short period of time if punishment is consistently applied;
- Behaviors which are not reinforced or reinforced only periodically will remain at a low frequency.

MAINTAINING BEHAVIORS

- Behaviors which are reinforced intermittently (either "every so many tries/attempts" or "every so many minutes") will remain at a higher frequency than those reinforced on a fixed schedule (every 10th lesson, every half-hour, etc.).
- Behaviors which are not periodically reinforced or consecrated in some way, will usually decrease to a very low rate or cease to exist.

CHECK YOURSELF!

A. If you periodically reinforce a new behavior, will it increase (a) quickly or (b) slowly?

B. Will a behavior which is periodically ignored (a) increase or (b) decrease?

C. Is a unit review of spelling words the best way to maintain a high percentage of spelling accuracy over time?

ANSWERS

TO BUILD A NEW BEHAVIOR

Tell the student exactly what you want, when you want it and how often you want it. Reinforce the desired behavior each time it occurs.

TO MAINTAIN A BEHAVIOR

Periodically remind the student that you like "such and such." Periodically, when you see the desired behavior occur, comment on it—let your student know you still "care about . . ."

* * *

A. (b). Slowly. New behaviors which are only *periodically* reinforced will develop much more slowly than when the behavior is reinforced each time it occurs. Many learners, especially those who are severely handicapped, receive mixed cues when new behaviors are consecrated 'only some of the time."

B. (a). Increase. Behavior which is ignored and then attended to will tend to increase in frequency and/or severity. If you're going to ignore behavior be sure that you ignore it *totally*.

C. No. The best way to maintain a high rate of spelling accuracy over time is to *periodically* check for and attend to correct spelling.

If spelling accuracy is checked every 3rd Friday or every 7th chapter, spelling accuracy will be high right before or on the date of the spelling check. It is likely to be less high during other portions of the month.

To maintain a high rate of spelling accuracy over time *periodically* administer review checks and reinforcement.

The single, most influential factor in the management of behavior is *consistency*.

DESIGNING AND IMPLEMENTING A BEHAVIOR CHANGE PROGRAM

Once you are cognizant of the principles of behavior and of the consequences of your own actions, you are ready to formally design a plan to change behavior in desired directions.

Once you have targeted and verified the behavior to be changed and once you have considered the importance of doing so, you are ready to begin.

First, decide the "most likely behavior of concern." Decide the desired direction of the behavior and decide the outer or end limits to the behavior (how much, how often, how good, etc.). Check out your "concerned behavior" with other professionals who serve the student. Is it also a behavior of concern to them? If so, are they willing to help you design and implement a program plan?

> If a behavior is of concern to more than one professional working with a child,
>
> and if those other professionals will agree to work with you in a behavior change program,
>
> the behavior will probably change in the desired direction *quicker* if you initiate *one common plan* rather than two individual plans.

Next, identify the procedures you will use to change the behavior in the desired direction. Then decide, after you have talked with the student and others concerned, WHEN the program will start and how long it will run (the expected duration of the behavior plan).

Lastly, specify how you will know when the behavior changes in the desired direction (or, perhaps, the undesired direction). Specify the positive consequences for the learner in obtaining the new behavior.

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BEHAVIOR PROGRAM PLAN

Student: ....

Behavior of concern: ....

Desired direction of the behavior: ☐ Increase to .... per

............; ☐ Decrease to .... per ....; Maintain at ....

per.............

Describe your behavior change plan: ....

....

....

....

Who will be responsible for managing the program? ....

WHEN will the plan be in effect (start date) and how long will it occur each day? start date/ .... duration/ ....

WHAT is the expected program completion date? ....

Describe how you will monitor the behavior ....

....

If your initial plan doesn't seem to be affecting the behavior in the desired direction, what is your back-up plan? ....

....

....

What positive consequence(s) is there for the student if she/he changes behavior in the desired direction? ....

....

Perhaps the most common infraction of the principles of behavior by first year teachers is that they tend to build behaviors which, in fact, they would like to decrease. Picture these examples.

Ms. Brannagan wants Brendon to be still so each time he talks-out, she tells him to be quiet.

Each time Colleen hits her head against the wall, Mr. Wood picks her up to comfort her.

Christine Care wants to eliminate the name calling in her room so she ignores it until it reaches such a level that she has to restrict the entire class from afternoon recess.

D. Presents wants Joann to stop bouncing the ball in the back of the study hall so she puts a mark on the board for each time the ball is bounced.

REMEMBER, PLEASE.

If you are trying to eliminate a behavior by calling a student's attention to it and it either remains the same or increases, it is precisely because YOU are reinforcing its occurrence . . . with or without your knowledge of doing so.

Behaviors—either appropriate or inappropriate—maintain or increase because someone is attending to "it."

If you want a behavior to increase, just call your student's attention to it.

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REINFORCEMENT

There are four important words you should remember about reinforcement: *reinforcement is not bribery.*

Reinforcement is that condition or those events which maintain and increase behaviors. Like:

- The pay check you receive at the end of each month;
- The meal you receive when you spend a goodly amount for a wonderful supper;
- The hugs and kisses you get from your children after you've had a lovely day together;
- The smiles of support you get from other faculty members after you've done something to help the 3rd grade math teacher;
- The pleasant comments you receive from the parents of your students for being such an outstanding teacher; and on and on and on.

If people stopped unconsciously reinforcing you, you'd probably, unconsciously, stop doing some of the nice things you do.

It works the same way with learners in the classroom. They'll unconsciously stop working if you unconsciously stop reminding them of how much you care.

Sometimes people are confused about reinforcement because they don't know enough about it. You can help them understand by pointing out what it is and perhaps its many variations. Certainly the appropriateness of the type—or variation—of reinforcer used depends on the needs of the learner . . . and most especially on what influences the behavior in the desired direction.

TYPES OR VARIATIONS OF REINFORCERS

Primary reinforcement—Those events or conditions which are not usually in a person's natural environment: special snacks after a good reading session; food.

Secondary or token reinforcement—Those events or conditions existing in the natural environment but used to reinforce a specific, targeted behavior: marks on a blackboard; chips/tokens/pieces of scratch paper (redeemable and not redeemable); money.

Natural reinforcement—Those events or conditions existing in the natural environment which are readily available by all people and at all times: smiles; praise; touch (hugs, kisses, etc.).

There are educators, parents and administrators who say that it is *not proper* to use primary reinforcers to increase performance. They insist that students must learn to respond to secondary or natural reinforcers.

We simply say that it is *not proper* to allow a student not to grow.

Of course, it is always best to start with natural reinforcers when you are designing your program. As long as they "work"—as long as they maintain or increase the behavior—that's fine. But when that variety of reinforcer is found *not* to increase behavior, then you need to move up the ladder to secondary or primary reinforcement. Once the behavior is built, then you can move down the ladder of reinforcers. You can "fade" primary reinforcers to secondary reinforcers. Eventually, all behavior should be maintained with natural reinforcers whenever possible. (Just a reminder: you wouldn't want them to fade your reinforcer for teaching to the natural level, would you?)

The work sheet on the following page is provided so that you may consciously list those "POTENTIAL" reinforcers which are available in your classroom or your school. Don't forget to include those events such as:

- Visits to the school kitchen;
- Helping the janitor;
- Delivering mail to the principal;
- Being first in the recess line;
- Picking the record following lunch;
- Helping with class timings (see monitoring);
- Taking simple, complimentary notes home to mom and dad;
- Motion/swinging, rolling, etc.

reinforcers

IGNORING BEHAVIOR

It has already been mentioned that if you ignore (do not attend to), a behavior, it will eventually decrease or cease to exist at all. While it sounds simple enough, ignoring a behavior is a truly difficult task and perhaps takes more consistent behavior on your part and on the part of others in the environment than any other method of changing behaviors.

Ignoring is difficult precisely because it is difficult to identify all those persons, conditions or events in the environment which reinforce the undesired behavior. For example, you can decide to ignore Robert's bizarre sounds but if even one student, or one aide, or one parent attends to it, it will continue. When your plan includes ignoring an inappropriate behavior in the hopes of eliminating it, be sure to instruct others in the environment to do the same.

Also prepare your students, helpers or colleagues for the natural chain of events which occur when you first begin ignoring the behavior:

1. The behavior will tend to increase in frequency and/or severity for approximately three days;
2. New behaviors may emerge in the hopes of attracting your attention.

Do not give in. Do not attend. If you "break down" within the first three days, the behavior will continue to exist at a higher rate than before you initiated your behavior change program.

Remember, if behavior is consistently ignored, it will decrease beginning approximately on the fourth day if not before.

The sheet on the following page is included to help you post behaviors of students which are to be ignored. Posting these behaviors will help remind you and others who enter your classroom that no attention is to be given to a student for certain behaviors.

ignore

WHO	WHAT

special attention

to:	for:	how:
1		
2		
3		
4		
5		

TO WHOM THESE LETTERS COME, *Greetings:* By virtue of the authority vested in them, the faculty, upon recommendation, this day congratulates

----

for outstanding growth in the area of self-management.

Date	Iya Newya Coulddoit

Teacher

Principal

THE STATE OF NEVADA

proudly presents to:

....

the

ACADEMIC EXCELLENCE AWARD

for

....

.... Date

.... Iya V. Proudofyou

AWARD

Congratulations to:

....

for:

....

....

.... Date

.... Teacher

THANK YOU!!!

Thank you to..

....

for...

....

.... Date

.... Teacher

The forms included on the following pages are intended to help stimulate your imagination. They are samples of very easy to make, very inexpensive ways of letting your students know how much you care about certain behaviors.

The "Special Attention" sheet is included for the same reason the "Ignore" worksheet was included previously: posting behaviors to be reinforced reminds you and others of the students who need special attention.

THE ASSIGNMENT RECORD SHEET

This sheet is especially designed for students who frequently do not complete their assignments or who spend a great deal of time off-task.

By explaining to the student that she or he has so many minutes to do each assignment and that assignments completed BEFORE a given time results in "saved time" students are given a natural consequence for completing their work. Saved time can be accumulated or used to obtain special privileges such as additional recess time.

Again, remember that this is not "bribery." Students who complete assignments early should be rewarded for efficient work.

CAUTIONS. When you begin using the Assignment Record Sheet, give your student more time on each assignment than you think it should take to complete the work. This will help ensure that the student has successful experiences at the beginning of the program. As the student completes more tasks "ahead of schedule," begin decreasing the amount of time per assignment or increasing the number of assignments to be completed.

Assignment Record Sheet

Name..Date..Total Time SAVED:

............minutes

Assignment	Time needed	Time used	Time saved	Comments

COUNT-TOONS: FOR SELF MANAGEMENT OF BEHAVIOR

While it is widely acknowledged that older, less severely handicapped children can and should manage their own behaviors, many educators tend to over manage young children because they believe they are not capable of recording or monitoring their behaviors.

Count-toons is a method (an intervention strategy) for the self monitoring of behaviors by young or severely handicapped students.

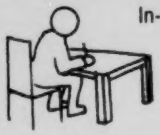
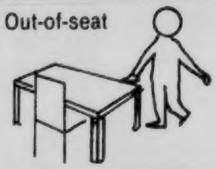
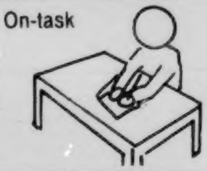
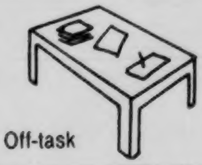
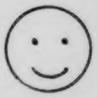
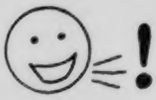
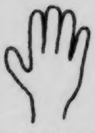
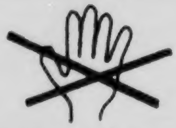
On the attached sheet, four appropriate and the related four inappropriate behaviors are identified with pictures. To encourage the self monitoring of in-seat (or out-of-seat or both) behavior for a young student, all a teacher need do is cut the strip and place it on the student's desk. Ask the student to tally, each day, the number of times he or she is in, out (or both) of his or her seat. Each day remind the student of the previous day's count and of his or her improved behavior.

Self-monitoring usually leads to self-managed behavior.

COUNT-TOONS

COUNT-TOONS are designed so that young learners can self-manage their own appropriate and/or inappropriate behaviors.

Ask your students to put a mark near the picture each time they behave like the picture. At the end of the day, count the tallies.

 In-seat		 Out-of-seat	
 On-task		 Off-task	
 Working quietly		 Talking-out	
 Raised-hand		 No raised hand	

TOKEN SYSTEMS

Token or "token economy" systems are very popular and usually very successful with older, less severely handicapped learners. Using points, chips, slips or paper, paper clips or tallies as consequences for desired behavior indicates to students that they have performed well . . . and that you are very aware of their ever-increasing good behaviors. Combined with verbal praise, tokens (which may or may not be redeemable for still other favorable consequences) quickly and quietly reminds students that there are reasons for:

- Completing work on time;
- Following directions;
- Completing homework assignments;
- Working cooperatively; and
- Helping with routine classroom chores.

On the following pages you will find a "Student Point Sheet" and an additional form for noting items which can be "purchased" in your classroom (The Buying and Spending form). As mentioned earlier, *it is not always necessary to have a point-redeeming plan* . . . but sometimes it is, and sometimes, it's just fun to do so.

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IMPLEMENTING A TOKEN ECONOMY SYSTEM

Like other interventions used to manage behavior, in using a token system you will need to make sure that *at the beginning of your program* students obtain points easily. This experience ensures that they understand how the program works and its advantages to them as learners. Carefully explain to your students how the "chips," "tokens," or "tallies" are to be awarded, how many will be awarded for specific behaviors* and how often and by what means tokens will be distributed. Also be sure to explain any rules about "saving points" from one day to the next or any deadlines by which points must be redeemed.

(While it is not usually necessary to include "PENALTY RULES" or conditions by which students may lose points, it is sometimes appropriate to do so. If you design a point system which includes rules for losing points, *be very careful that your system does not allow students to fall into debt. It is generally unacceptable to design and implement a system which results in students owing you points!* It is not fair to allow students to return home at the end of what must have been a frustrating day with a ledger which sometimes resembles your checking account—that is, minus twenty!)

Lastly, if you want to implement a system for redeeming tokens, points or chips for additional, favorable consequences, be sure to seek input from your students. More than anyone else, they will be able to tell you what's worth having and how much it should "cost." Work *with* your students to develop a classroom list of privileges and opportunities. And be aware of only one caution: *do not allow your students to include those events or items which you will not let students do without* (i.e., lunch, recess, some free time, etc.).

---

*Specific behaviors and the number of consecrating points may vary from student to student.

EXAMPLES OF EARNED PRIVILEGES

- Running dittos.
- Making coffee in the teachers' lounge before morning break.
- Helping younger children or children in other grades with their work or recreational activities.
- "Session excuse"—excuse from one reading session, one math session, etc.
- "Free day"—accumulated points resulting in a free day to be used as the student chooses (at home with the parent's permission, in another grade, etc.).
- Getting a ride home with a favorite teacher.
- Monitoring classroom academic "timings."
- Passing out stars, stickers, or points at a point in the day.
- Helping the janitor.
- Visiting the workers in the lunchroom kitchen.
- A five minute meeting/visit with the principal.
- Helping with the duplication of file materials.
- Helping with classroom furniture rearrangement.

STUDENT POINT SHEET

Name:

Date:

Enter all previously *saved* points

Number of Points awarded	For:	Cumulative Points earned
Total points earned *today*:	SPENDING How many: For what:	Cumulative points *saved*

BUYING AND SPENDING

Item/privilege	Cost in points

PART THREE/ MONITORING

Through the process of managing behaviors—through the process of building it and guiding it—new avenues of growth are opened for learners of all ages and abilities. Through the identification of classroom standards students come not only to know, but to experience, the type of standards which exist in all social environments. They come to respect others as well as themselves as they come to understand that rules are freeing as well as binding.

As important as behavior management is there exists, still, a lack of carefully monitored attention to it. While many teachers have identified and impose classroom management rules, still too few know how close individual students are to mastering specific behavior goals. For whatever reason or reasons this happens, it is important that you seek to change it. It is not important for every student to know if their behavior is "getting better," but for many handicapped children who must learn how to be integrated back into classroom with large numbers of students, it is very critical. By monitoring behavior you are able to tell students: (1) how close they're coming to an expected behavior goal; and (2) how well they're doing from a previously recorded behavior. The latter allows you and your students to know if the behavior is maintaining, increasing or declining. And it is this information which is helpful to you in deciding to continue or to revise a particular behavior management plan.

It is not the intent of this section to explore complex systems of behavior monitoring. To some extent Module Eight fulfills that function. But it is the intent here to remind you how simple monitoring behaviors can be and how important it is to do.

MONITORING BEHAVIORS

As mentioned, monitoring systems can be as simple or as complex as you want to make them. But for your sake as well as for that of your students, strive to keep behavior management monitoring systems simple. Simple systems of progress allow even young students to take an active part in the collection and recordkeeping of the data.

To monitor classroom behaviors such as "in-seat," "hand-raised," "talk-outs," you need to do just a few things:

1. *You need to target the behavior.* Targeting behaviors has already been discussed, but if you need a quick review, turn to page 18.

2. *You need to establish a time and place to count the behavior.* Consistency in the amount of time you count the behavior each day is very important. Think of the discrepancy of counts if they were taken for 10 minutes one day, an hour the next or for a full school day still another time. Because the times the counts were taken vary, the data are not comparable unless someone wants to spend time dividing each set of data until it can be read as "movements per minute," etc. Simplify the problem by picking a time the behavior is likely to occur and stick with it! Likewise, select one place in which to gather the behavior. Imagine how meaningless the data would be if it were collected in the lunchroom on Monday, on the playground on Tuesday and in the library on Wednesday!

3. *You need to establish a counting procedure.* The simplest way to count a behavior is to mark a tally or press a button on a counter each time the behavior occurs. Some teachers have students drop a marble in a bucket or push a bead from one end to another on a bracelet—but always each time the behavior occurs within the specified time.

While it is not absolutely critical, counting procedures which leave a "permanent record" such as tallies seem to be most useful

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in maintaining a high rate of accuracy. But the critical key is that you and your students utilize a method which results in being able to compare performance from one day to the next or from one monitoring period to another.

4. *You need to establish and utilize a recording procedure, including a "picture" or chart of the data if possible.* Lastly, it is most meaningful to students if they have an idea of how they're doing from one day to the next. This can be accomplished simply by keeping a record of scores over time. This allows students to review previous data and make judgments about their own performance. An example of a student record sheet is enclosed for your use and revision. If a lot of data is being collected, mere numbers seem to lose their impact. When this begins to happen, it may be necessary to transfer the raw count data to a chart so that a visual picture of progress is possible. By marking the desired level of performance on the chart (i.e., 100 percent accuracy or 35 correct responses per minute) students can easily see how close they're coming to the goal. Or on which days they seem not to be doing so well.

5. *You need to share the data.* As the old saying goes, "one picture is worth a thousand words." And so it is with data, especially charted data. Share your data certainly with the student. But also share the data with the student's parents, with other teachers who serve him or her and with the principal. This will cue these support people to reinforce the desired behavior whenever they pass the student.

IF YOUR DATA IS MOVING IN THE DESIRED DIRECTION

- Continue the program *exactly* as it is being implemented—you're doing fine!

IF YOUR DATA IS NOT MOVING IN THE DESIRED DIRECTION (Is staying the same or moving in an undesired direction)

- Increase the amount (frequency) or type of reinforcement.
- Decrease the difficulty of the task.
- Decrease the number of skills on which you are asking the student to demonstrate improvement.

- Add modeling, shaping or peer demonstration of the desired behavior at the desired rate or frequency.
- Ask that the student demonstrate improvement on the skill during only a portion of the school day as opposed to the entire day.
- Slice back to the skill preceding the one the student is working on; make sure the student demonstrates by acquisition of the information/skill and fluency or proficiency.

IF YOUR DATA INDICATES THAT THE STUDENT HAS REACHED HIS OR HER EXPECTED GOAL

- Congratulate the student and begin to make plans for maintaining the new behavior by (1) establishing a new goal; and/or (2) reinforcing the behavior less frequently.

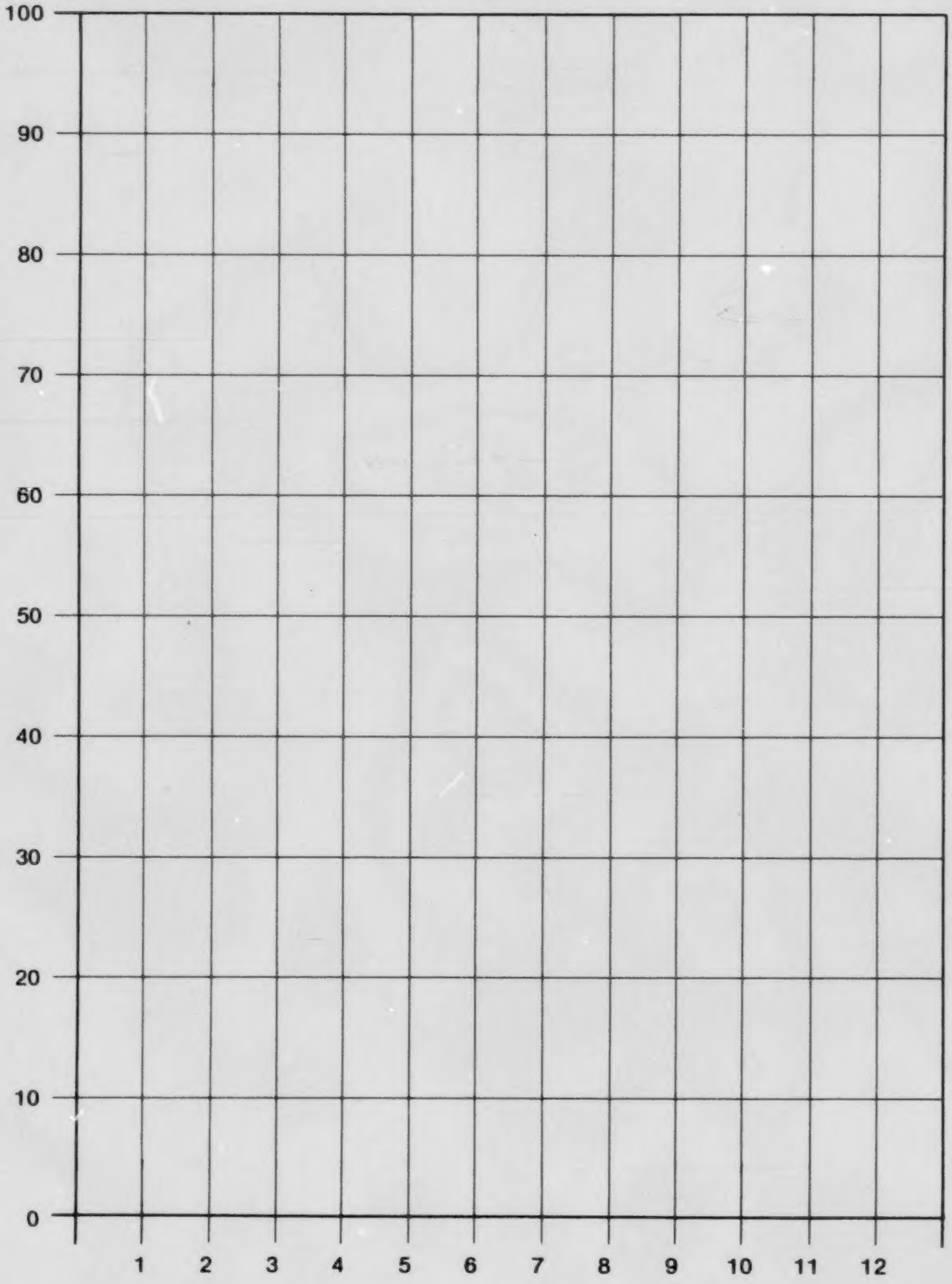
STUDENT RECORD SHEET

Student:

Behavior: Desired Goal:

Date	Number correct	Number error	Percent correct	Comments

Student:



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Nevada

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CLASSROOM MONITORING STRATEGIES

Module Eight of the *Nevada Teachers' Resource Kit* is a product
of the Nevada Department of Education,
Division of Special Education, 1979

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PURPOSE

In its finest form, educational measurement is the art of carefully monitoring specific behaviors of learners. In its many forms it is viewed as a bother by some and as an absolute necessity by others. But most educators concerned with appropriate educational programming agree that measurement of some sort is critical to the implementation of effective instructional programs.

This module is about counting math facts, scoring spelling words and recording talk-outs. It's about charting correct and error responses on sometimes "funny-looking" charts. But most importantly, it's about how you can help your students achieve specified goals by knowing *how accurately* or *how proficiently* they perform on skills before, during and after instruction.

The purpose of "Classroom Monitoring Strategies" is to provide you with guidelines for developing and implementing direct and daily measurement procedures in your classroom for nonhandicapped or severely/profoundly handicapped children and youth. Attention to specific portions of this module should provide you with information regarding:

1. Targeting behaviors (what to monitor);
2. Establishing data systems;
3. Charting collected data;
4. Setting desired rates and dates for specific skills;
5. Establishing program guidelines;
6. Analyzing data; and
7. Making program changes based on data.

In short, this module is intended to introduce or review skills which will help you to know exactly where you want your students to go and how to help them get there by making program changes based on the data they produce on a daily or near daily basis.

THE PURPOSE OF COLLECTING DIRECT AND DAILY DATA

Daily Data

In this module monitoring classroom behaviors (either academic or social) means monitoring behaviors on a daily or near daily basis. The reason for this is really quite clear: the collection of data (or information) about specific student performances allows you to assess the effectiveness of your teaching in a meaningful manner. Using data to make program changes for students results in narrowing the performance gap between handicapped and nonhandicapped students.

What makes a learner handicapped is the performance discrepancy between his or her performance and that of peers. As a special educator, it is your job not only to offer ''good instruction'' for nine months, but also to offer the *kind of instruction* which will decrease the performance gap between the learner and his or her peers. By monitoring performance on a monthly basis you obtain information about how effective your instructional program was for the month. If your monthly assessment shows that the student progressed well during the month, you're in good shape. But what happens when the monthly check reveals that the learner hardly progressed at all? Not only did the discrepancy between your student and his or her peers *not decrease;* in all probability it *increased.*

Monitoring performance weekly is better than monthly. But the same kinds of problems exist with weekly monitoring that exist with monthly monitoring. That is, you *may* waste a student's time because he or she is using an ineffective program. Even though you may only ''waste'' four or five days using a weekly checking schedule, you nonetheless have ''wasted'' four or five days when the learners could have been growing.

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Direct Data

Along with collecting data frequently enough to have it make a significant difference in the amount of learning your students are able to achieve, a second issue is the *directness* of the data you collect. *Direct measurement* means the collection of data on skills which may or may not relate to skills you wish to monitor. The examples of direct and indirect systems below should help clarify this issue.

Direct and Indirect Monitoring Systems

Skill: Write answers to additional facts, sum to ten.

Direct Measurement Strategy

- A series of one-minute samples of a student's performance on a sheet of add-facts, sums to ten.

Indirect Measurement Strategy

- Samples of student performance on workbook pages containing addition and subtraction facts; or
- Samples of student performance on manipulating blocks to show sums to ten.

Skill: Reading from basal reader.

Direct Measurement Strategy

- A collection of two-minute or five-minute samples of a student reading from his or her basal reader; or
- Correct and error scores (say words) on a 100 word passage from his or her basal reader.

Indirect Measurement Strategy

- A sample of the student's reading on a list of words compiled from the basal reader; or
- A collection of scores from the basal workbook; or
- A student's scores on the reading section of the Stanford Achievement Test.

ORGANIZATION

To facilitate easy access to information, *Classroom Monitoring Strategies* is divided into the following sections:

Part I:	Basic Monitoring Information;
Part II:	Utilization of data/intervention strategies; and
Part III:	Systems for use with severely/profoundly handicapped children and youth.

Part I, "Basic Monitoring Information," includes discussions which center around underlying concepts of classroom monitoring including how and what to "target" (points to monitor,) time frames and data systems and basic charting strategies and charting conventions.

Part II deals explicitly with how to use data to make program changes when the data indicates it is important to do so. Utilization of data and intervention strategy discussions includes information on when and what types of program changes may be indicated by the data you collect (i.e., instruction vs. motivational changes).

Lastly, Part III is included to provide those teachers serving severely/profoundly handicapped children with data gathering and data display procedures which are (more than not) unique to the population which they serve. Included in this section are discussions of how to monitor very finely sliced sequence steps and how to display the data so that it is understandable to the wide variety of professionals and para-professionals working in the classroom or home environment.

Because the information in these sections is largely technical, frequent reviews and self-checks are included to help you assess your correct skill level with the hope that you will target module sections which are especially pertinent to your needs.

Good luck.

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Further Organizational Breakdowns

Part I: Basic Monitoring Strategies
  Section One: Five Basic Measurement Points
  Section Two: Four Common Charting Conventions
  Section Three: Data Display; Chart Variations; Desired Rates and Desired Dates

Part II: Interventions
  Section One: Program Change: When
  Section Two: Program Change: How

Part III: Systems for Severely/Profoundly Handicapped Children and Youth

PART ONE/ BASIC MONITORING STRATEGIES

SECTION ONE

The usefulness of any measurement system is based on doing a few, initial things correctly. As far as can be told, in classroom monitoring system development the critical elements are to:

1. Identify the "right behavior" to monitor;
2. Identify only "observable behaviors";
3. Count the behavior consistently;
4. Record the behavior; and
5. Chart whatever you count.

In Part I, Section One, each of these points is briefly discussed in an effort to familiarize you with critical concepts in designing and implementing effective measurement programs.

Five Measurement Points

1. *Identify the "Right" behavior.*

If you want a learner to increase or decrease a specific academic or social behavior you first must identify the *exact* behavior you wish the learner to change and the desired direction of the behavior change. Don't assume you "know" what the learner needs to work on based on last year's teacher comments, records handed down or even comments the janitor slipped your way. Though these information systems may produce very accurate and often reliable information, you need to check them—give them validity—by counting and observing the actual occurrence of the skill(s) yourself. Many times the process of initially identifying skills or behaviors is termed "targeting the behavior" or "pinpointing." Targeting or pinpointing behaviors can be done for either academic or social behaviors such as identifying a student's math skills or assessing a students's ability to follow basic classroom rules. In the case of the former, it is often appropriate to target a behavior by administering a skill-screener, a subtest from a standardized test or by consistently checking skills by having students complete specified workbook pages. To assess a student's ability to follow basic classroom rules, it is often necessary to specifically identify the classroom rules and then count the number of times a student follows the rule(s) or does not follow the rule(s).

2. *Identify "Observable" behaviors.*

You've heard it a hundred times: "You can't measure understanding." Right? Well, that statement is partially true and partially untrue. You can't measure "understanding" *per se,* but you can measure observable behaviors which are indicative of understanding. For example, if you want Mick Alobe to understand amount-numeral correspondence you can:

A. Ask Mick if he understands amount/numeral correspondence;

B. Ask Bud Wiser who sits behind Mick and copies answers if he thinks Mick understands amount/numeral correspondence;

C. Test Mick's ability on the new (the very brand new and infamous) "Draw a Woman" screening test; or

D. Count the number of times Mick gets amount/numeral correspondence problems correct on a worksheet of 20 amount/numeral correspondence problems.

For those of you who are wizards on multiple-guess tests, you've probably already discovered that the most appropriate answer is "D." While you cannot directly count Mick's "understanding," you can assume understanding when you directly measure an observable skill.

Guidelines for Identifying Observable Behaviors

	Yes	No
1. Can you do the behavior yourself?	☐	☐
2. Can you count it?	☐	☐
3. Can you see, hear, touch or feel the behavior?	☐	☐
4. Can you identify a *starting* point and an *ending* point for the behavior?	☐	☐

* * *

3. *Count the behavior consistently.*

Once you've targeted or pinpointed an observable behavior, your next step is to establish a consistent place, consistent method and consistent period of time in which to measure it. Maintaining consistent measurement strategies insures that you collect meaningful data.

A. *Consistent Time.* When you look at several scores of a learner, your intent is usually to discover some meaningful pattern of performance based on the scores. For example, if you were to look at Margaritta's talk-out scores of 18, 17, 28, 2 and 12 for Monday through Friday respectively, you might say that Wednesday was a doozy of a day (if indeed you said "doozy" at all). But what new light would be shed on the matter if Margaritta's teacher informed you that Wednesday's score was exceptionally high because she had more time to observe and count the behavior on Wednesday? In essence, the original data become useless because they are not based on a consistent reference point; you cannot compare one day against the next. Maintaining a consistent time establishes a reference point so that the data can be interpreted meaningfully.

B. *Consistent Place.* Just as unequal amounts of time will distort data, inconsistent location of data collection will also distort data. Consider the differences that might occur in counting a student's talk-outs if in measuring them each day for 20 minutes you moved from the library on Monday to the classroom on Tuesday to the lunchroom on Wednesday or the gym on Thursday. Deciding upon the most critical location for the targeted behavior is as critical to the collection of meaningful data as is consistent time.

C. *Consistent Methods and Materials.* The caution to use consistent methods and/or materials should hit home with those of you who have tried to monitor performance in phonics by scoring workbook pages. Consider this example. On Monday, Paula J. completed 30 correct problems with 0 errors on page 7 of *Fonics was Phun* workbook; on Tuesday, page 9, she completed four problems correctly and again made no errors. If the data were displayed on a chart, it would be graphically clear that Paula worked better or faster on Monday. If the data were displayed on a percent chart, we might assume that Paula J. did the same amount of work each day with the same level of accuracy.

The truth is, P. J. did not do the same kind or amount of work on Monday and Tuesday because she was not provided with the same kind of skills, or the same number of skills to complete. On Monday, Paula's teacher gave her a workbook sheet which demanded that she trace circles; on Tuesday it asked her to color pictures beginning with the phoneme /b/. Because the sample of P. J.'s performances was not consistent across materials, it is impossible to make statements or assumptions about her performance from one day to the next.

Consistent use of skill or target-specific instruments can save you heartbreak and hours of headache. Whenever possible, decide the critical element to be monitored and design a sheet which you can use to map student performance from one day to the next.

4. *Counting and Recording Behavior.*

Even though you may have an absolutely terrific memory, you probably need to write down the dates on which you measure specific behaviors and the actual results of your count. Even the best photographic memory may get Marvin's talk-out rates of 73, 55, 82, 84 and 24 confused with his out-of-seat rates of 72, 66, 88, 67 and 59. Therefore, before you actually implement any measurement system, design data record sheets on which you can mark both dates and counts. Your scratch paper pile will love you.

5. *Chart Whatever You Count.*

While it is possible to determine student growth from one to the next by looking at raw figures such as 73, 55, 82, 83 and 24, displaying the same information on a chart gives you a picture of progress. *At a glance,* you'll be able to see how Marvin did this week compared with last week, or yesterday as compared with today. Charting information on some sort of "not-too-scary" graph will allow you to communicate progress effectively to other teachers, to parents and to your students. Charting your data will allow you to utilize the data and to make decisions as to when and what kind of program changes may need to be made. And using data to make decisions is really what it's all about.

Another Word . . .

Once you decide what it is you want to count, how to count it and where, you might want to decide *how long* it should be counted.

The table on the next page lists several time-frames for counting a behavior. The time-frame you choose will determine precisely the kind of data you will need to collect.

TIME-FRAMES AND DATA SYSTEMS

Rate Data

Count the behavior *each time it occurs* within a specified amount of time (i.e., one minute, two minutes, thirty minutes, etc.).

Cumulative Data

Count the behavior *each time it occurs* within specified perameters and *add the score to the preceding scores.*

Percent Data

Count the behavior *each time it occurs correctly* within a given amount of trials.

Duration Data

Count the *amount of time* the behavior is occurring (from the start of a tantrum to the end of a tantrum).

Latency Data

Count the *amount of time* which elapses between when a behavior ends and when it begins again.

SECTION 1

A Quick Review

I. A RATIONALE FOR MEASUREMENT

The primary purpose of gathering direct and daily data is to assess the effectiveness of your teaching. Using data to make program changes for students results in narrowing the performance gap between handicapped and non-handicapped students because it maximizes instructional time.

It is not the mere collection of data, but the utilization of data to make program changes, which is important.

II. FIVE IMPORTANT ELEMENTS IN ESTABLISHING A MEASUREMENT SYSTEM

1. Identifying the "Right Behavior" to measure;
2. Describing the target behavior in observable terms;
3. Selecting a consistent time, place and methodology for counting the behavior;
4. Establishing a counting and recording system for data collected; and
5. Charting collected data.

SECTION TWO

FOUR COMMON CHARTING CONVENTIONS

CHARTING

While some teachers can effectively monitor progress by analyzing raw scores (uncharted data or numbers) most teachers find it easier to interpret data if it is plotted on a chart. This section provides you with a very few basic guidelines for charting the data you collect on academic or social behaviors. Reading it and completing the exercises should make it easier for you to chart data which you can share with your students and colleagues.

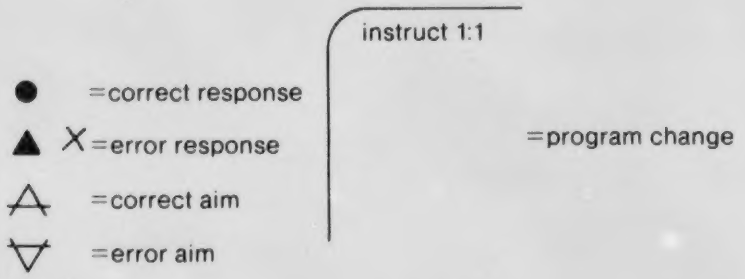
There are two basic reasons for charting data:

1. Charted data provide you with a *visual* picture of student performance; and
2. Charted data provide you with a *means of monitoring progress* in relationship to previous and expected performance.

Regardless of the level of charting sophistication, most educators who chart daily data agree on four very basic "charting conventions" or charting symbols.

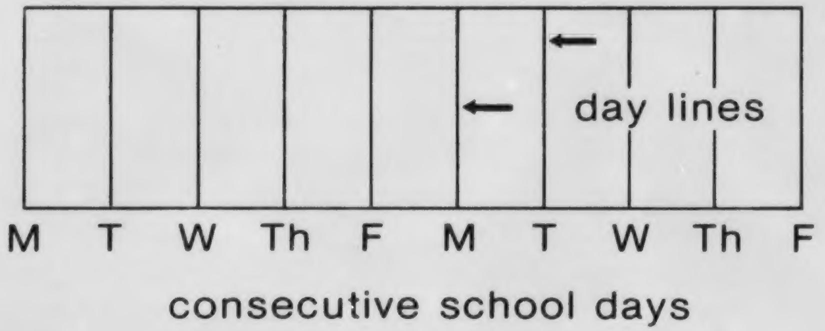
The four most common charting conventions:

1. Circles to indicate correct responses (●)
2. X's or triangles to indicate error responses (X; ▲)
3. Aim stars to indicate the desired rate (⍋ for corrects; ⍒ for errors)
4. Phase change lines to indicate a program change or intervention (┌──)

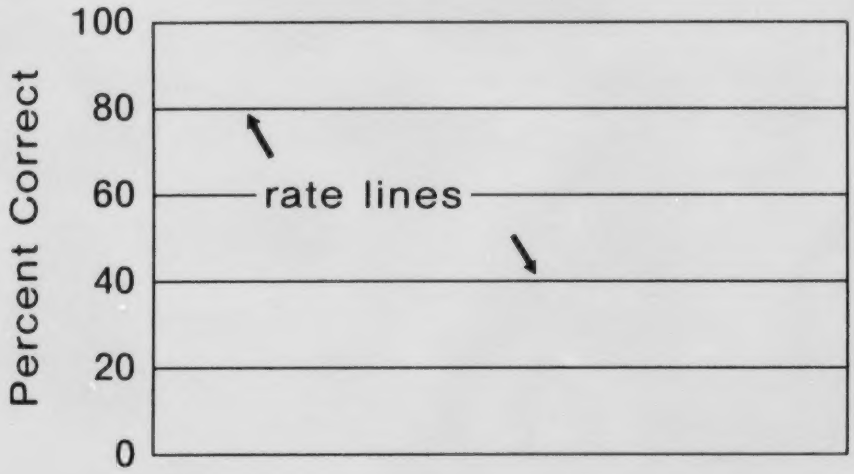

● =correct response
▲ X =error response
⍋ =correct aim
⍒ =error aim
instruct 1:1
=program change

CHARTING AND OTHER NICETIES: DAY LINES AND RATE LINES

To actually chart data, there are only two other pieces of information you need. One, you need to know that the lines which run vertically (up and down) on any chart usually represent *day lines*. For example, on the grid below, the lines represent Monday, Tuesday, Wednesday, Thursday and Friday. The descriptor at the base of the grid also reports this fact.


day lines
M T W Th F M T W Th F
consecutive school days

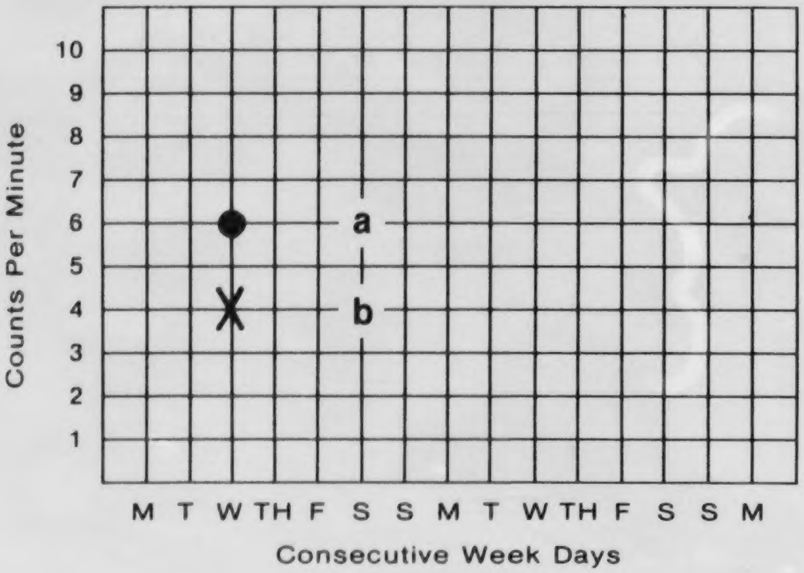
Secondly, lines which run horizontally on a chart left to right, most often represent *rate lines* which can be described as percent or raw-counts such as "Movements per Minute." The descriptor on the side of the grid or chart will tell you the exact function of the horizontal lines. On the grid below, the horizontal lines represent percent correct from zero to 100 percent.



By combining the two grids, you have a chart which could tell you the percent correct of a student (any behavior you choose) on any school day. Different charts are designed to meet specific needs: always select a chart which meets the need you have at a particular time.

A QUICK REVIEW

1. Name the four most common charting conventions.
2. Name the function of the vertical lines on a chart.
3. Name the function of the horizontal lines on a chart.
4. On the grid below, describe the function of the horizontal lines and the vertical lines.
5. Identify the charting conventions used on the chart.



Check your answers on the next page. Thanks!

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ANSWERS TO A QUICK REVIEW

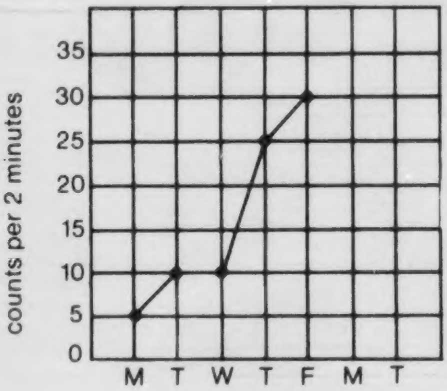
1. The four most common charting conventions are:
(a) Circles for correct scores (●)
(b) Triangles or x's for error scores (▲ X)
(c) Correct and error aim stars (☆ ★)
(d) Phase change lines (┌──)

2. The function of the vertical lines is usually to register the *day*.
3. The function of the horizontal lines is usually to register the *score*.
4. On the grid, the vertical lines represent consecutive week days and the horizontal lines represent counts per minute.
5. (a) Correct response;
(b) Error response.

CHARTING CORRECT AND ERROR RESPONSES

By combining day-line/rate-line information and by using the four most common charting conventions, you can chart almost anything (in the world or your school).

Let's suppose you've counted the number of addition problems Maureen Mary Margaret MacGlone has completed during two-minute sessions from Monday through Friday. Given the chart below, this is how her correct data would look:



Could you tell from looking at the chart that MacGlone's score on Monday was 5 correct responses in two minutes? (I hope so, because if not, you've probably skipped over some pages you need to read!) You should be able to because the symbol for correct responses (a circle) is entered on the *MONDAY LINE* at the *RATE* of five. The descriptors at the side of the grid report that the sample of behavior was taken for two minutes.

Using the chart above, circle the following scores:

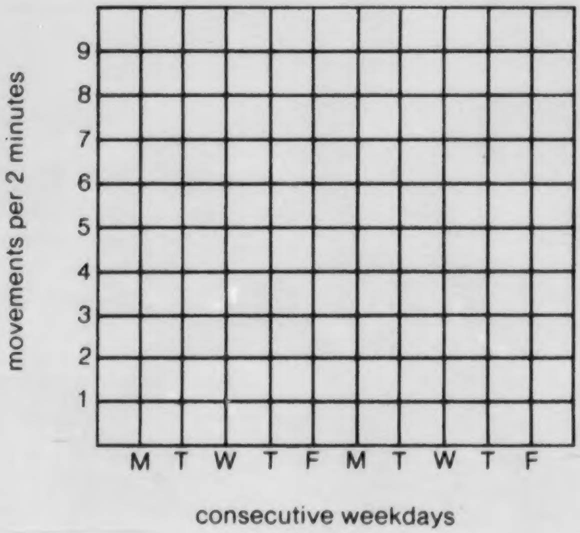
Thursday	25 correct
Tuesday	10 correct
Friday	30 correct

On the chart below, chart Maureen Mary Margaret MacGlone's error responses.

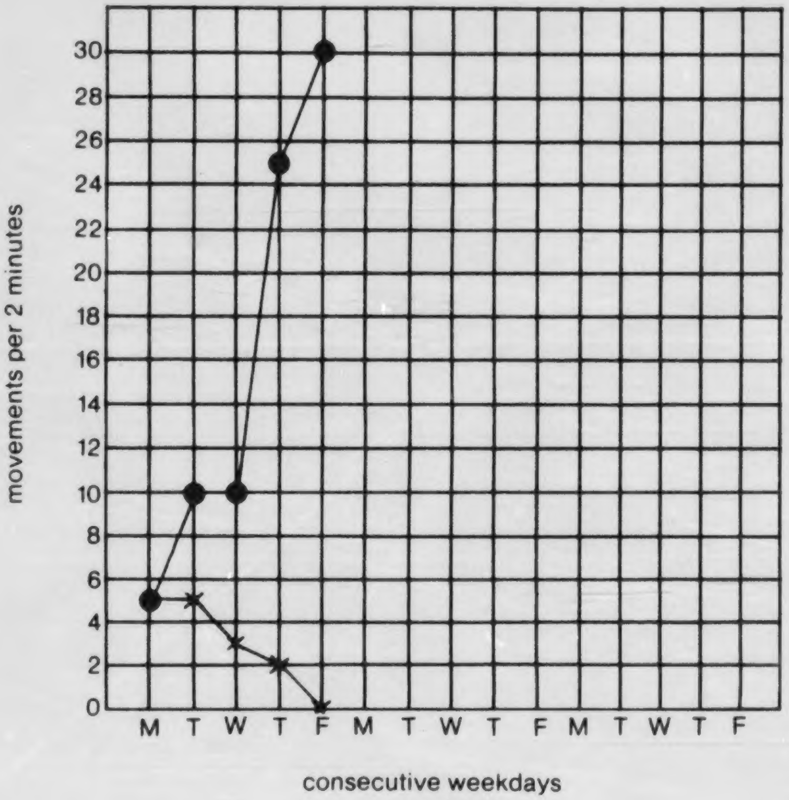
A Special Note: If you use the symbol "x," the *middle* of the X ← goes on the score. If you use the triangle symbol, the *apex* of the triangle ▲← goes on the score.

MacGLONE'S ERROR DATA

Monday	5 errors
Tuesday	5 errors
Wednesday	3 errors
Thursday	2 errors
Friday	0 errors



Because it is more convenient to keep correct and error data on the same chart, most educators (and other nice characters) do just that. The chart below combines MacGlone's correct and error scores. Just for the fun of it (and because we included this chart for the following purpose!) you might check the error data you just charted on the previous page. Did you get the data plots in the right place? Even though the chart is slightly different, your pattern should be the same.



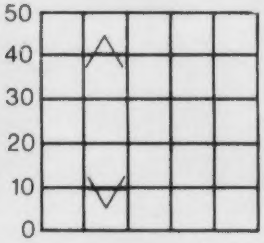
How'd you do?

AIM STARS

Whenever you count something, it should be with the intent that IF the behavior needs changing, *You Will* do something to change it. For example, if you want to decrease climbing on desks, you might design a program to decrease that behavior. You also set a *Desired Aim* or *Desired Rate* of *Error Performance* which, for climbing on desks, might realistically be a rate of zero.

The symbol A is used on charts to indicate the correct *Rate at Which* you expect performance to be at the *End of the Program*. The symbol ∀ is used on charts to indicate the rate at which you expect errors to be at the end of the program.

On the chart below, what are the *Desired Rates* (or levels of expected performance) for correct and error behaviors?



The *Correct Aim Star* (A) is registered on the expected performance rate of 40.

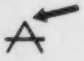
The *Error Aim Star* (∀) is registered on the expected performance rate of 10.

The cross-bar of the star always points to the exact rate.

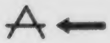
A ← indicates the desired rate.

Often, educators will place the aim star on the date they expect the performance to be achieved. When such is done, the aim is not placed at the beginning of the chart, but rather, on the desired *Date* and at the *Desired Rate*.

When you wish to do this, place the *Tip* or apex of the aim star on the desired *Date*. Place the cross-bar of the star at the desired *Rate*.



the tip indicates the desired *Date*

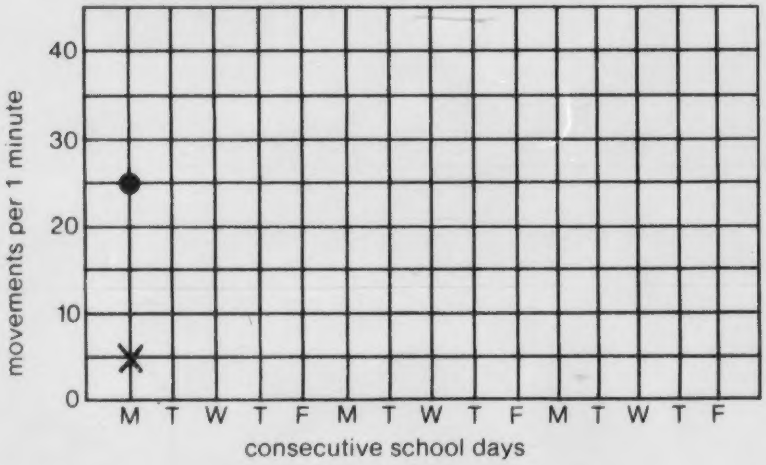


the bar indicates the desired *Rate*

ON THE CHART BELOW

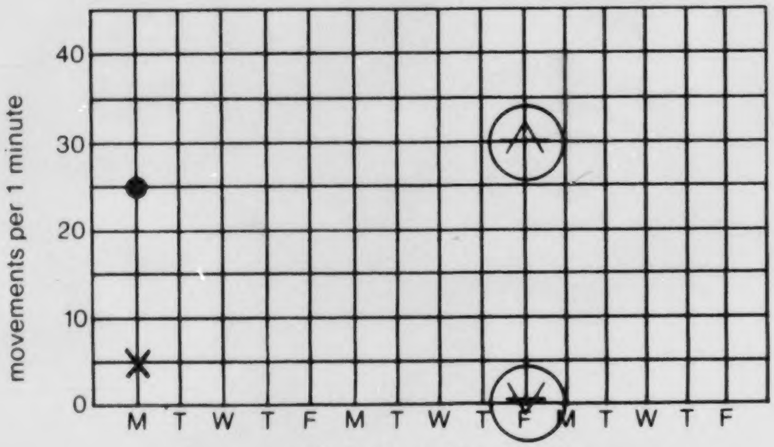
Place a correct aim star at a rate of 30 correct movements per minute on the second Friday.

Place an error aim star at a rate of 1 error movement per minute on the second Friday.



Now, check YOUR answer against the answers on the next page. If you placed your aim stars in the correct positions, take a break and relax for a few moments. If, by chance you made an error, correct your error and THEN take a break! (You've been great so far!)

FOR YOUR VERIFICATION AND REINFORCEMENT!



BREAK! BREAK! BREAK!

—Alfred Lord Tennyson

PHASE CHANGE LINES

Many times it is important to note on your charts the Program Changes that you make. Without writing down *what* you changed and when, it may be difficult to remember exactly *why* the data started changing directions.

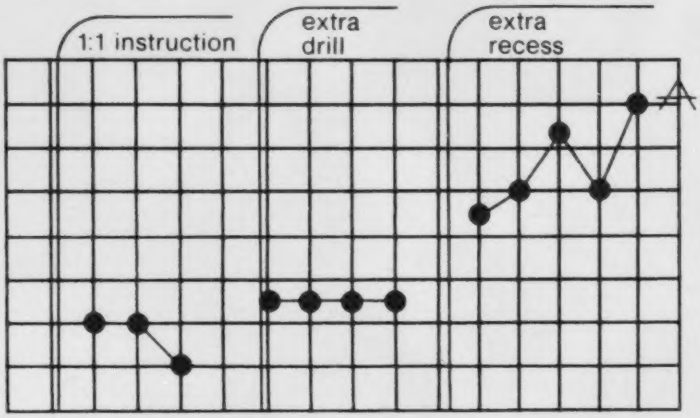
Phase change lines provide charters with a quick and easy convention which indicates

WHEN A CHANGE OF ANY KIND WAS MADE

The Phase Change Line also provides a standard place *Where* you can indicate *What It Was* that you changed to make that babe Gabe perform better!

Phase change lines should be drawn on a chart *just before the day on which the change was made*. By-and-large, phase change lines are drawn from the base of the chart to the top (or someplace near the top) where they then curve and move across the chart—ending when the particular change ends. Thus, every piece of data falling under the phase-change umbrella is said to be "within a phase."

On the chart on the following page, phase change lines indicate the different program changes Abe made to get his pupil, Gabe, to perform better.



Draw phase change lines on your chart whenever you make a change in:

- PROGRAM SEQUENCE (moving from one step to another).
- INSTRUCTIONAL STRATEGIES (more drill/less drill, new workbook sheet, etc.).
- MOTIVATIONAL STRATEGIES (adding contingencies, etc.).

Also enter phase change lines on your charts when you:

- Begin a new program; and/or
- Meet an aim and move on.

Believe it or not, the information you keep under your phase change lines will prove invaluable to you as you attempt to share your charts with parents, other teachers, and most importantly, your students. It allows you to say, "See, Harriet, I told you if you just looked over the spelling list once, you'd do better. And see . . . right here on your chart—when we started previewing the words—you got better!" Harriet will love you.

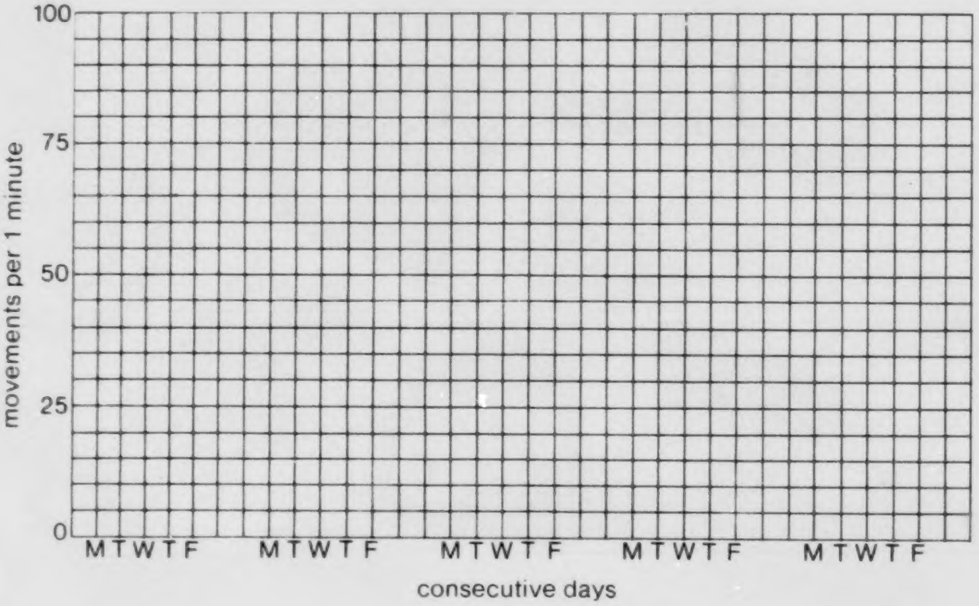
On the next page is a raw data sheet which lists a number of scores for Willie Makeit (n. Will hē' · māk · it). On the chart provided, chart the:

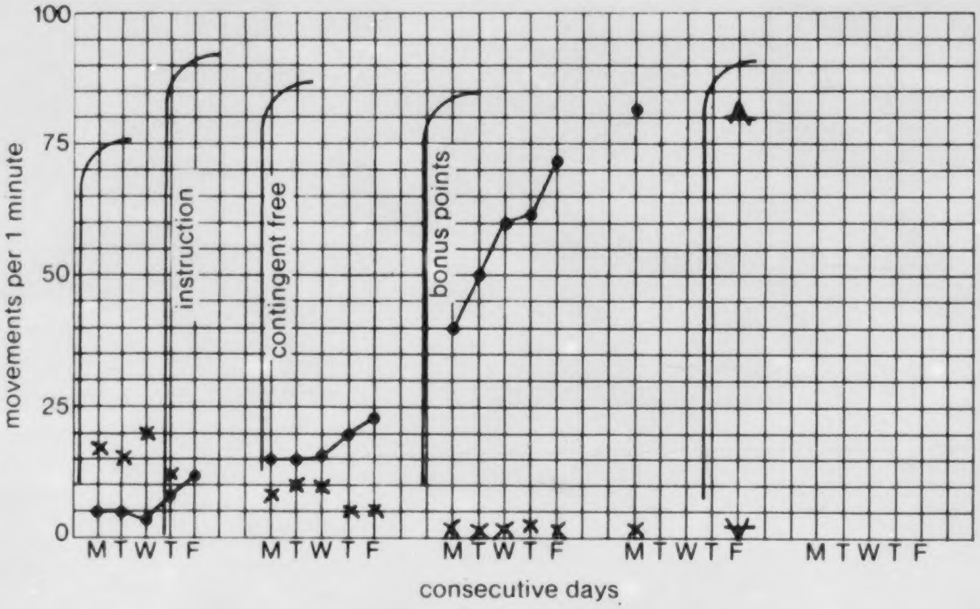
1. Correct responses;
2. Error responses;
3. Correct response aim star;
4. Error response aim star; and
5. Enter the phase change lines.

You can check your accuracy on the following page.

Name: Willie Makeit
Skill: Reads level 2 dolch sight words
C. Aim: 80 correct per minute
E. Aim: 1 or fewer errors
Aim Date: 4 weeks from start of Program

Date	Correct Count	Phase Changes	
M	6	18	No instruction
T	6	15	No instruction
W	4	20	No instruction
Th	8	12	1:1 instruction
F	11	20	1:1 instruction
M	15	8	1:1 instruction
T	15	9	1:1 instruction
W	16	9	1:1 instruction
Th	20	5	Contingent free time
F	22	4	Contingent free time
M	40	2	Contingent free time
T	50	1	Bonus points for c. increase of 10 or more
W	60	3	Bonus points for c. increase of 10 or more
Th	62	1	Bonus points for c. increase of 10 or more
F	72	1	Bonus points for c. increase of 10 or more
M	82	0	
T			Stop Program/Aims Met





congratulations!

If up's the word; and a world
grows greener
minute by second and most by more.
If death is the loser and life
is the winner
(and beggars are rich but misers are poor)
Let's touch the sky
with a to and a fro (and a here where there)
and away we go!

e. e. cummings

SECTION THREE

DATA DISPLAY

CHART VARIATIONS

DESIRED RATES AND DATES

GRAPHICALLY DISPLAYING RAW SCORES

It is remarkably easier to view and chart data which has been entered on a sheet of paper in an orderly manner. The chart below is an example of what is often called ''An Event Summary Sheet.'' Its primary function is to provide the data collector (the teacher, the student, the parent, etc.) with a standard form.

The ''Event Summary Sheet'' you design or select for your own students should be one with which you are most comfortable. So play around with lines and spaces until you hit upon that perfect data entry sheet!

day	error	correct	time		plotted	phase

event sheet summary

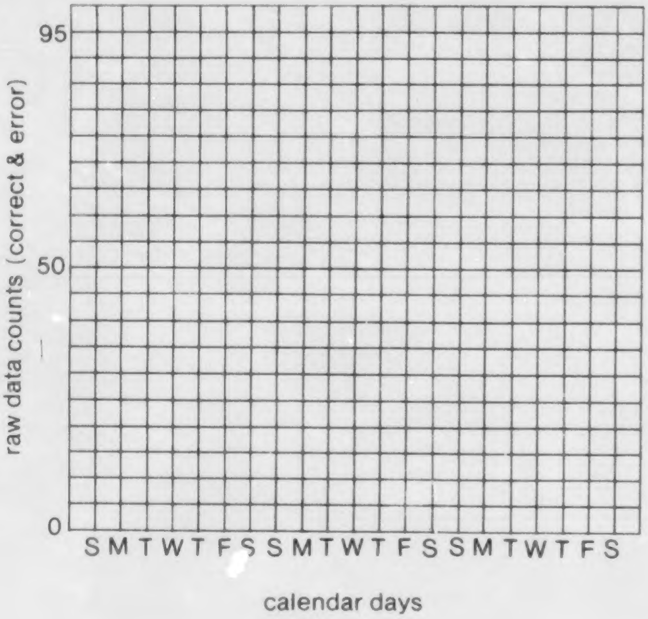
For practice, read the tale and the ensuing data which is described on the next page. Chart the data reported on the Event Sheet Summary on the graph provided. Then check your answer on page 35.

Once upon a desk there sat Homer. Homer sat upon desks most of the school day. In fact, Homer sat on the desks in the classrooms so much that it became annoying to Ms. Niagra Falls.

One day, Niagra decided to keep track of the number of minutes Homer was sitting on top of his desk (out-of-seat) as well as the number of minutes he was sitting in his chair. Below are her results.

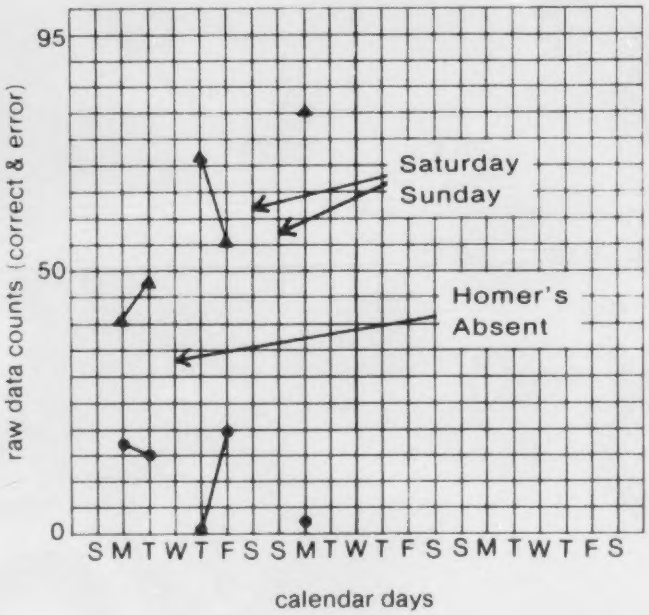
Review and enter the data on the chart provided.

day	error out of seat	correct in seat	time		plotted	phase
Mon.	40	14	SCHOOL			
Tues.	47	12	DAY			
Wed.	ABSENT					
Thurs.	72	0		(Homer should be home!)		
Fri.	55	22	↓			
S						
S						
Mon.	80	3				
Tues.						
Wed.						
Thurs.						
Fri						
S						
S						



CHECK YOUR CHARTING

Here are the data plots
in the odyssey of Homer
as he crossed Niagra Falls.



▲ used to indicate inappropriate behavior

● used to indicate appropriate behavior

CHARTS AND CHARTING VARIATIONS

For a number of years, measurement enthusiasts have continuously marvelled at the broad assortment of charts on which different kinds of data can be plotted. My goodness, there seems to be a chart for every skill and a color for every season! Well, perhaps you may not share in this rather absurd eccentricity, but gaining some understanding of different "funny-looking" charts may help you read data or display data with greater ease.

Such is the purpose of Section III.

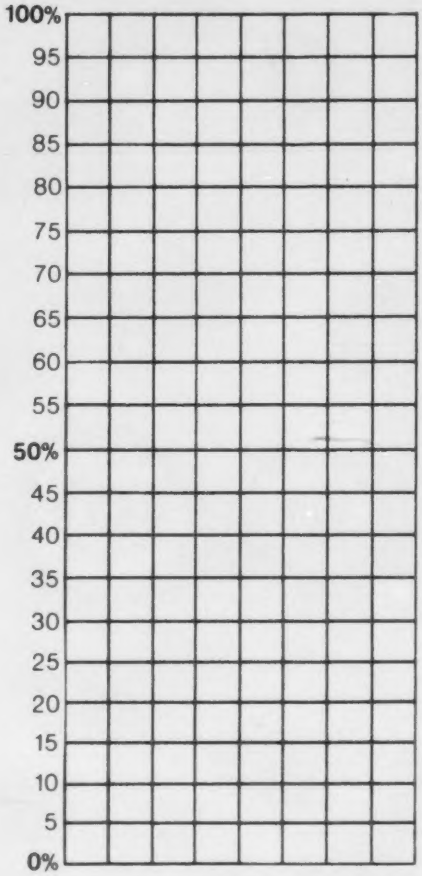
There are basically two types of charts used in education:

1. Charts on which the rate lines are equal in distance from one another (commonly called "equal interval charts"); and
2. Charts on which the rate lines are spaced proportionately (commonly called logarithmic charts).

The chart on the next page is an equal interval chart. The distance between any two values in succession is exactly the same. The advantages of using an equal interval chart for recording data are:

1. Most administrators, teachers and parents know how to read them immediately; and
2. They are usually readily available in most school districts.

EQUAL INTERVAL OR ARITHMETIC CHARTS



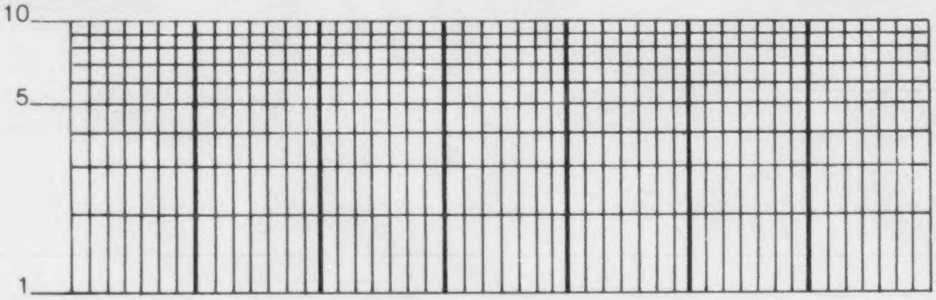
85% to 90%
increment of 5

75% to 80%
increment of 5

65% to 70%
increment of 5

Arithmetic Chart

On equal-interval or "arithmetic charts, the distance between any two measures is exactly the same.



The chart above is ratio or logarithmic; the space between any two successive values is spaced proportionally. But because the DAY lines are spaced equal distance from one another, the chart is most accurately called ''*Semi*-logarithmic'' because *only the rate lines* are spaced proportionally.

The advantages of using semi-logarithmic charts are:

1. Proportional charting is more indicative of *How* we learn.

On a proportional chart, the change represented from a response of one to a response of two is shown as an increase of 100 percent—which it is. From two to three, the gain of new information is really only 50 percent. (Think about it in terms of age. When a child grows from 1 to 2 years, that child has doubled his or her life span. When the child is 3 years old, the increase would not be another 100 percent but only 50 percent, etc. An increase in age from 70 to 71 years is hardly significant in terms of total growth!)

2. When a learner is in an acquisition stage of learning, new gains are shown as significant advancements. In the proficiency or fluency stage of learning (high rates), advancements in single units are seen as relatively minor.

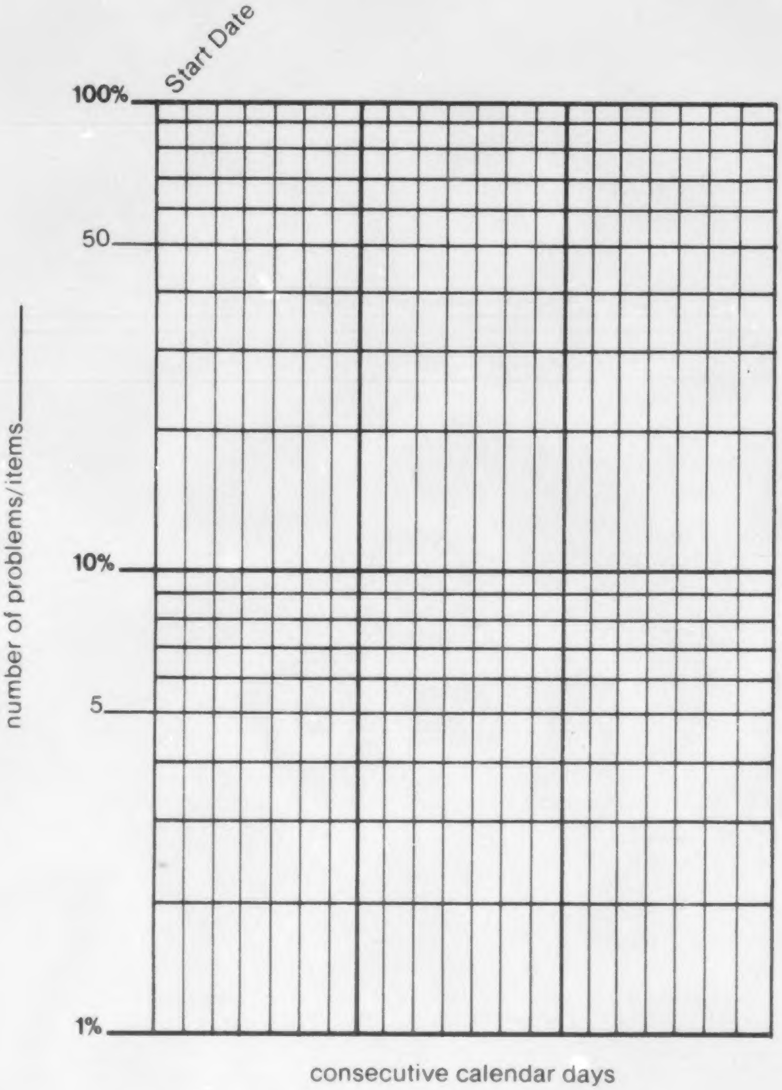
MORE ON FUNNY-LOOKING CHARTS

Regardless of the type of chart used (equal interval or ratio), charts can also vary according to:

- The number of weeks contained on the chart.
- The number of days per week displayed on the chart (7 consecutive calendar days or 5 consecutive school days, etc.).
- The base of the chart. Some charts provide educators with an opportunity to measure behaviors over an 18 to 25 hour period and still record the data in movements per minute. If you wish to learn to use charts with a base other than one, it is recommended that you read White and Haring, *Exceptional Teaching,* Part 3. Charles Merrill Publishing Co., Columbus, Ohio, 1976.
- The number of "cycles" on the chart. (Cycles are increments of 10.) Charts may have a ceiling (top rate) anywhere from 10 through 1,000.
- The kind and type of supporting information. Some charts have room on which to record the daily raw data scores as well as a grid on which to chart the data. Some charts provide you with room to write your long range goal as well as your short term objectives.
- Their color and size. Some charts are big and others are little. Some are clear and some are not. Some blue, some red, some brown, some green. Choose one which matches your personality the best!

Student ____________________

Program ____________________



5 Week Graph

Student ....

M												
T												
W												
T												
F												
M												
T												
W												
T												
F												
M												
T												
W												
T												
F												
M												
T												
W												
T												
F												
M												
T												
W												
T												
F												

Program ....

460-B

5 Week Raw Data Sheet

Student ....

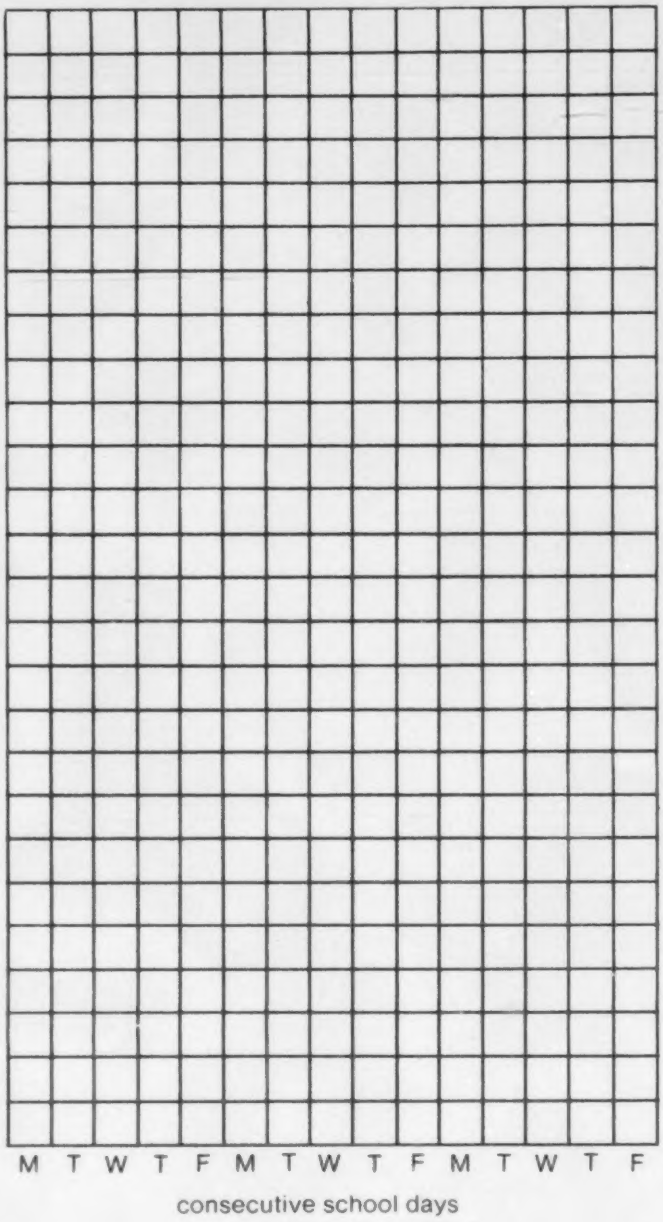
		Correct Count	Error Count	Percent
1st Week				
	M			
	T			
	W			
	T			
	F			
2nd Week				
	M			
	T			
	W			
	T			
	F			
3rd Week				
	M			
	T			
	W			
	T			
	F			
4th Week				
	M			
	T			
	W			
	T			
	F			
5th Week				
	M			
	T			
	W			
	T			
	F			

Program ....

3 Week Progress Chart

Student ______________________ Start Date ______________________

Program ______________________ End Date ______________________



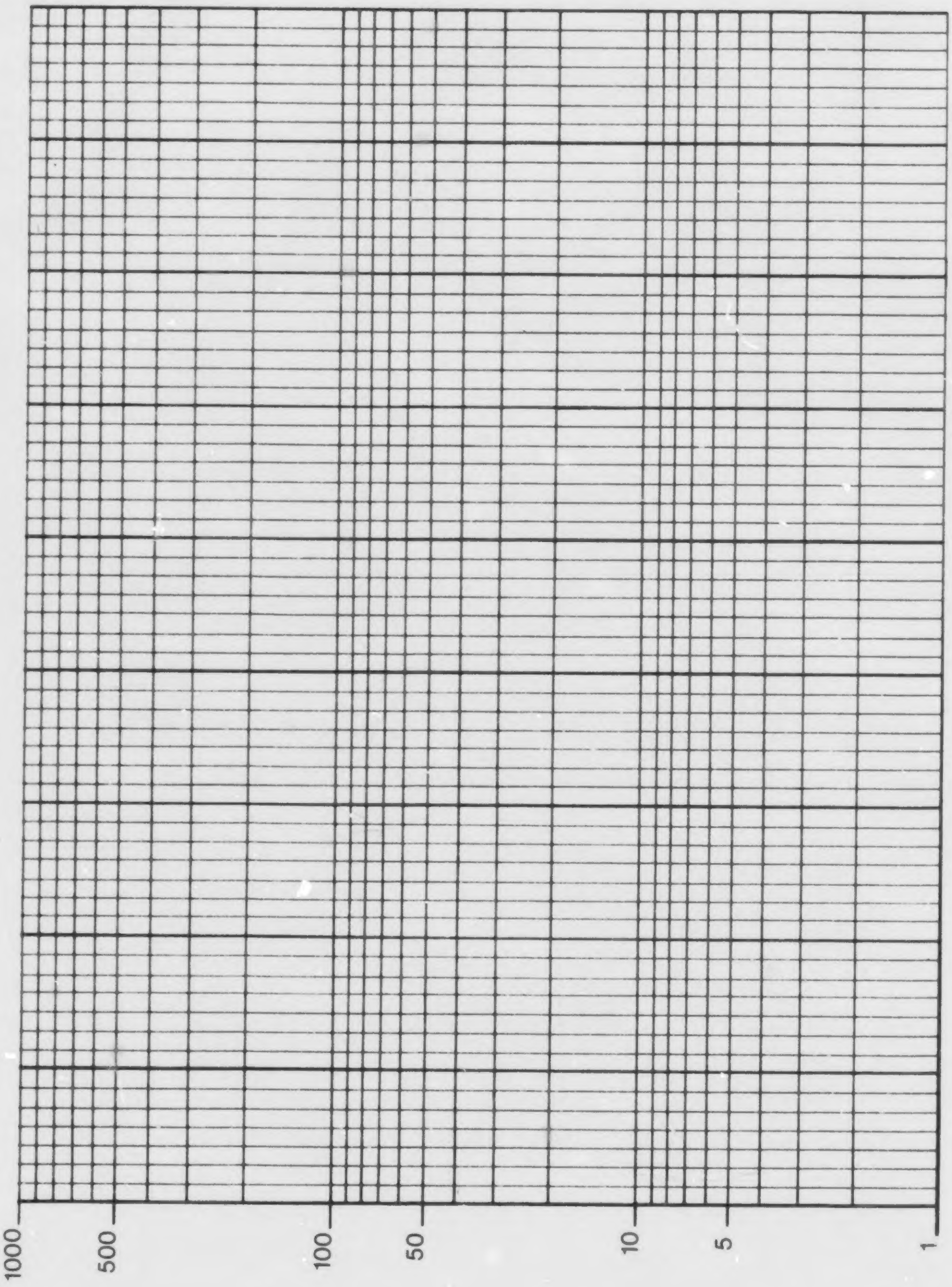
DAILY DATA SHEET

Student ________________________________

consecutive week days M T W T F

student ______________________ correct aim ______________________

skill ______________________ error aim ______________________



EVERYTHING YOU NEED TO KNOW BUT NEVER WANTED TO READ

ACQUISITION AND PROFICIENCY

For many, many years educators have assumed that if a skill can be performed with 100 percent accuracy, it is learned and that the student is ready, if not always willing, to move on to the next step in the sequence. Recent research, however, has provided information which indicates that "learning" might be more complex than simply acquiring information (White and Haring, 1976).

While many skills learned to a standard of 100 percent accuracy can be said to be both "acquired" and "learned," many skills performed only to an accuracy criteria soon fade from the student's repertoire of responses—sometimes until skills once acquired are no longer retrievable when needed! (Any of you who have taken the graduate record exam after being out of school for a number of years can understand the concept of "lost" algebraic formulas. Even though you "learned" the information once, it is no longer in your repertoire of behaviors if you have not kept using it since high school.)

Consider the handicapped learner who knew the vowel sounds last week but can't recall them this week when he needs to decode C-V-C words with short a. Might he or she have "lost" that specific information because it had only been acquired but not acquired proficiently?

Throughout the last ten years, research in clinical and field based settings has indicated that information can be retained and retrieved if it is not only performed accurately but fluently as well. Fluency or proficiency means that a learner can perform the task quickly. Research results indicate that learners who meet proficiency standards or proficiency criterias retain information better and longer than learners who meet only accuracy criteria.

The information on the next page is included to help you determine when it might be appropriate to establish proficiency criteria for your students as well as accuracy criteria.

SELECT A PROFICIENCY OR FLUENCY CRITERIA

- When a skill is prerequisite to the development of subsequent skills (i.e., say vowel sounds, writes digits to add facts).
- When information needs to be available for quick retrieval.
- When long term retention is important—especially of skills a student may not be asked to perform in the normal course of any day (i.e., emergency phone numbers).

Whenever you have questions as to whether you should set accuracy of proficiency standards, check these guidelines. If you're not sure, consider this question: are you willing that the student should acquire the information now *but not be responsible for it in the future?* If your answer is "No" you probably need to set some sort of proficiency standard.

DESIRED RATES AND DESIRED DATES

Once you determine that a student should achieve both accuracy and proficiency, how do you go about determining a proficiency criteria? Well, a proficiency criteria or standard—most often called a desired rate—can be established in a number of ways.

GUIDELINES FOR SETTING DESIRED AIMS

- Use the rate of a student who performs the task accurately and fluently in a grade one year above the grade you teach.
- Use the mean rate of a class of students in a grade one year above the grade in which you teach.
- Use the rate of the fastest, most accurate student in your class.
- Use a percentage of the rate of your adult friends.
- Consult the literature, particularly the precision teaching literature. Many educators are recommending proficiency rates or proficiency ranges.

DESIRED DATE FORMULA

Desired dates for achieving specific skills or objectives can and should be set for each skill you teach a student. Setting desired dates for expected performance will help you plan the length of time you have to teach—and the length of time a student has to learn. On the next page is a quick and easy formula for setting desired dates.

$$\frac{\text{No. of days/weeks}}{\text{No. of sequence steps}} = \text{No. of days/weeks per step}$$

EXAMPLE

Pete AuJay is a second year teacher at We-never-lose-one Elementary School. With 30 weeks to teach and a reading sequence which contains 20 steps, Pete wants to predict about how long each student should spend *on each step* if they are to complete the sequence.

$$\frac{\text{No. of weeks} = 30}{\text{No. of sequence steps} = 20} = \text{1.5 weeks per step}$$

Easy, no?

Actually, the formula is very easy. But there are a few cautions:

- Always review the difficulty of each sequence step and make adjustments in the amount of time you allot for its mastery; some steps are naturally more difficult than others and some are naturally easier. Make adjustments using your good judgment.
- Be realistic. Even with the best intentions and with the best instruction, sometimes there is just not enough time to teach everything there is to be learned. Prioritize your instruction, deleting or dropping steps which do not lead to the mastery of a long term goal.

CHECK YOURSELF

1. When is an accuracy criteria insufficient for a program standard or criteria?

2. Why and when is setting a proficiency standard important?

3. What are two ways you can establish a desired rate?
(a)
(b)

4. What is the formula for establishing a desired date?

Answers to these questions can be found within the context of this section.

PART TWO/ INTERVENTION

Almost without exception, teachers strive to provide their pupils the best, the most effective educational programming possible. Since the dawn of more precise classroom measurement systems (sometime in the late 1960s), this task has become slightly easier. By collecting regular and sensitive measures of student performance, teachers can be provided information about:

- How well a student is performing on a given task and in different situations;
- The effectiveness of instruction and materials; and
- What can be expected in terms of short term objectives and/or long term goals.

The key phrase is *can be*. The collection of direct and daily data—no matter how sensitive—is insufficient in bringing about efficient and appropriate programming.

TO ENHANCE STUDENT PERFORMANCE, DATA MUST NOT ONLY BE COLLECTED— IT MUST BE USED.

Part Two: Interventions contains two sections. Section One discusses a method by which you might know *when* to make a program change; Section Two discusses what *types* of program changes might be most appropriate. Certainly it is hoped that this information will help you develop skills by which you may enhance the quality of instruction you are now providing your students.

SECTION ONE

PROGRAM CHANGES: WHEN

(The rules presented in this section are a modification of data decision rules initially designed by Drs. Owen White and Kathleen Liberty of the Experimental Education Unit, University of Washington, Seattle, Washington.)

It is possible to simply look at data and periodically make program changes—or "interventions"—when things don't look so good. Or to stop a groan when things look great. But the utilization of data decision rules may make the process more systematic as well as more efficient.

This section of classroom monitoring strategies provides you with data decision guidelines. Very simply, it identifies procedures which you can easily apply to the data you collect. By applying the rules you will be able to know exactly when to make or not make a program change.

Data decision rules are those guidelines which help teachers both analyze the data they collect as well as providing a guide for data interpretation. In this paper, five easy rules are proposed:

1. Create a visual picture by plotting the data on a chart.
2. Establish desired rates and desired dates for both correct and error responses.
3. Draw a program guideline from the first three days of data to the desired rate at the desired completion date.
4. For accelerating targets (targets which should "go up") make program changes whenever the data fall below the program guideline for three *consecutive* days.
5. For decelerating targets (targets which should "go down") make program changes whenever the data fall above the program guideline for three *consecutive* days.

RULE ONE: Create a visual picture of the data you have gathered by plotting the information on a chart.

Let's face it. Sometimes it's just too difficult to know if a pupil is getting better or getting worse by looking at a pile of numbers

50 2
41 20 8
33 14 37 41
20 36 72 12 13
18 17 15 23 18 19

Pile of Numbers[1],[2]

Sometimes it's even difficult to know if a pupil is getting better or worse when the numbers are listed—especially when it is important to look at both correct and error responses. Consider the data of Seagram S. below:

Day/Date	Corrects	Errors
M	7	2
T	9	3
W	8	1
TH	Absent	
F	10	0
M	9	1

---

[1] I know—cute. Very cute.

[2] What is the typist to do? Turn off mind. Fingers—advance! ( ) have fun typing this—looking out over the sea—in case you're interested, Corky.

Meaningful? Perhaps. But look at each of the figures below and on the following pages. Wouldn't it be much easier to discuss progress while viewing a picture of the performance as well as looking at the raw scores?

FIGURE 1A: Bar Graph display

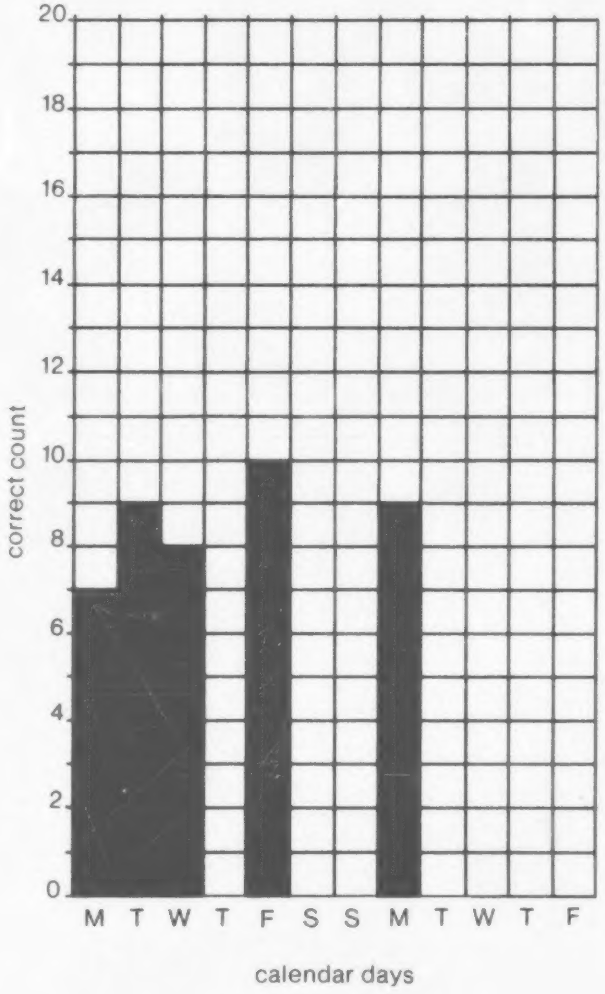


Figure 1A represents the data on the preceding page as plotted on a *Bar Graph*. The bar graph is usually easily understood by a good many people and gives a relatively clear picture of performance. Perhaps its biggest draw-back is that it is impossible to chart *both* correct and error responses on the same chart.

FIGURE 1B: Percent Chart displays

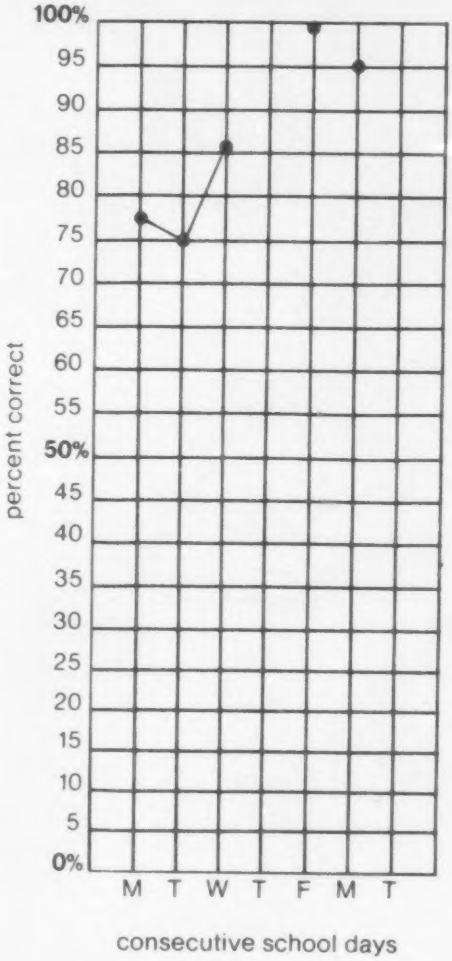


Figure 1Ba

Figure 1Ba represents S.S.'s data as it is plotted on an equal-interval or arithmetic percent chart. Figure 1Bb on the following page depicts the same data as it is displayed on a logarithmic percent chart.

As with a bar graph, it is possible only to record either correct *or* error performance on a percent chart. Unlike the bar graph, however, by simple subtraction (score minus 100), a reader could ascertain error information.

In using a percent chart, it is always wise to keep the problem poll *constant* from one day to the next. This allows the data to be relative; it affords it some meaning.

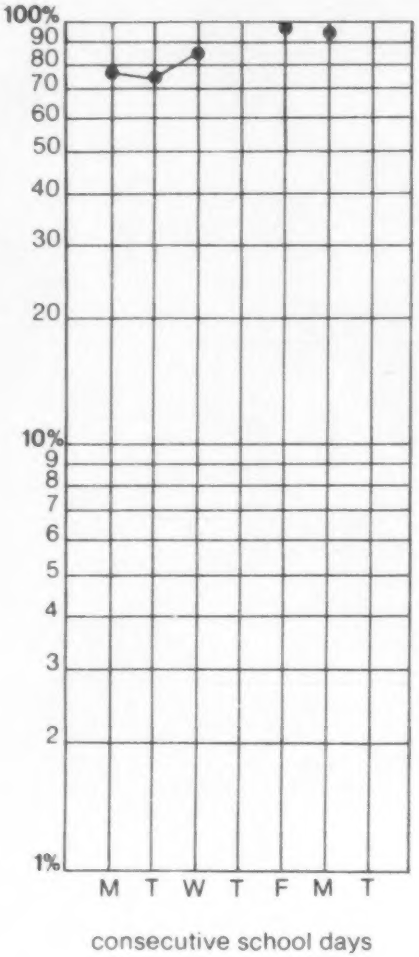


FIGURE 1Bb

Charting on either equal-interval or proportional percent charts finds its prime advantage in that most educators, parents and students understand the concepts of "percent correct" and/or "percent error." Additionally, many schools stock percent charts or percent chart masters. As always, accessibility is a prime motivator!

(For a detailed discussion of equal-interval v. proportional charts, see Part One, Section Three of this module.)

It Is Important to Note that the data entered on percent charts 1Ba and 1Bb did not come from a *consistent* poll of problems. Therefore the data is only somewhat helpful. Consider, for example, that the student on Tuesday of the first week and Monday of the second week got the same correct score but because the number of problems varied, so did the score.

FIGURE 1C: COUNTS PER MINUTE(S) CORRECT AND ERROR DATA DISPLAY

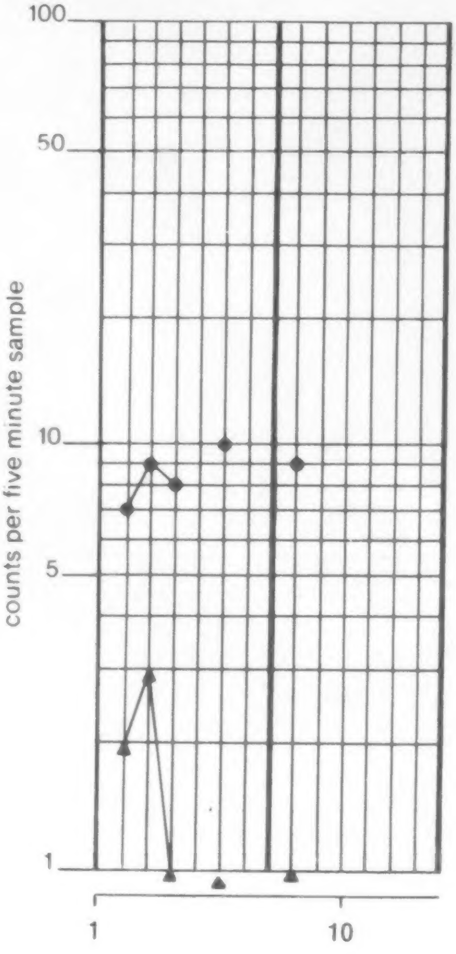


FIGURE 1C

Lastly, Figure 1C represents Seagram's data as it is entered on a proportional or logarithmic chart. You will note that both correct scores (represented by a ●) and error scores are entered for each day (▲).

Count data can be entered on either ratio or equal-interval charts, just as the data represented in Figure 1B was depicted on both ratio and equal-interval charts.

Recording exact count data allows you and your students to know *Exactly* how many problems were completed each day as well as the number of correct and error responses. It allows for varied problem "populations" (i.e., 9 problems on Monday, 22 on Tuesday, etc.) while maintaining the integrity of the data.

RULE TWO: Establish desired rates and desired dates for both correct and error responses.[1]

When a teacher establishes a short term objective, it is important that he or she specify the exact behavior (i.e., writes digits) and include both:

- The amount of the behavior desired; and
- The date by which the behavior should be acquired.

A Desired Rate or *Desired Aim* is a statement of *How Well* a student should perform a specific task. Desired rates can be stated for both correct performance targets and/or error performance targets. They can be stated in terms of:

- Accuracy (Percent correct);
- Rate (correct and error scores per minute);
- Raw score (correct and error counts) and/or;
- Cumulative scores (today's score plus yesterday's score).

As pointed out earlier, you'll know if a desired rate is set appropriately if it leads the student to maintaining a fluent or accurate degree of performance for correct responses or a low response rate for errors.

Whenever setting desired rates the most important thing to do is to maintain your common sense. Always remember that, currently, no one knows for sure what is the "best" desired rate for a specific behavior. Your judgment and student performance are the best indicators of correctly set desired rates. Remember too that the establishment of desired rates must be tailored to a particular student. Take into consideration special handicapping conditions such as cerebral palsy or muscular dystrophy. If a student can't make marks on a paper at a rate of 30 slashes per minute, it is unlikely that he or she will be able to write digits to math facts at that or a similar rate.

A desired date is a statement of *when* a student should reach an established desired rate or aim. Desired dates can be set for both correct and error responses. The date may be the same for both types of responses or the dates may vary (i.e., you may expect errors to drop off in two weeks, but you won't expect a fluent rate of correct responses for approximately three weeks).

Like establishing desired rates, the establishment of desired dates requires your good judgment and best guesses. A good starting place for setting appropriate dates, however, involves

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[1] Guidelines and formulas for setting both desired rates and desired dates are presented in detail in Part One/Section Three of this module.

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determining how much material (the number of sequence steps) must be covered within a specific time frame. By determining the number of sequence steps and dividing that number into the number of days or weeks left to teach, you will have a rough idea of how many days—or how many weeks—you should expect to spend on each sequence step. Obviously, the formula is not fool-proof. Many times it is necessary to adjust the amount of time for certain steps—adding additional time for relatively difficult steps and subtracting time for relatively easy steps.

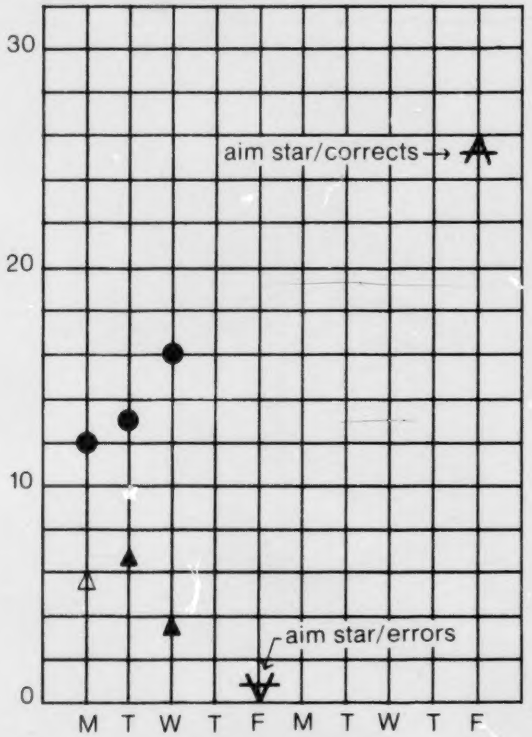
DESIRED DATE FORMULA

$$\frac{\text{No. of days/weeks left to teach}}{\text{No. of sequence steps or objectives}} = \begin{array}{c}\text{days/weeks}\\ \text{per step}\end{array}$$

The establishment of both desired rates and desired dates is important because it allows both you and your students to know how much must be learned in a given period. Desired rates and dates provide you with the basic information for determining whether your instructional programs are effective or ineffective.

By showing your students graphically what their expected rates of performance are, you also have the basis for discussing with students, progress to date.

Desired dates are entered on a chart using the A symbol for the correct aim and the ∀ symbol for an error aim. The cross-bar of the symbol should cross the chart at the desired date. The apex or tip of the symbol should be placed on the desired completion date.



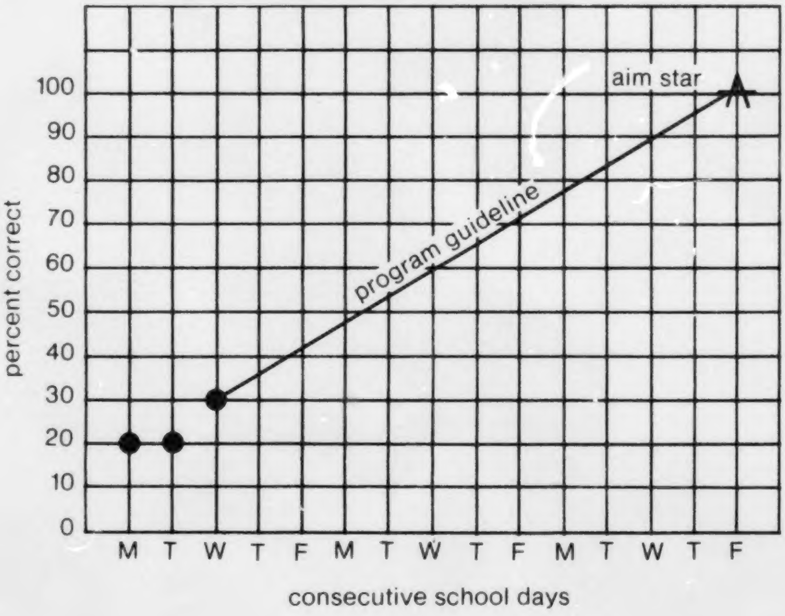
RULE THREE: Draw a "program guideline" from one of the first three days of data to the desired rate and the desired date.

In order to make decisions about program change or program continuation, it is important that you have some established guideline upon which to base your decision. One of the easiest ways to establish such a guideline is to draw a line from *one of the first three days of data/information* to the desired aim and date star. You can decide the best point *from* which to draw the line:

- The highest/best score;
- The lowest score;
- The middle score; or
- The last score.

It is suggested that you try several alternatives and use the data point which seems most appropriate for any particular student.

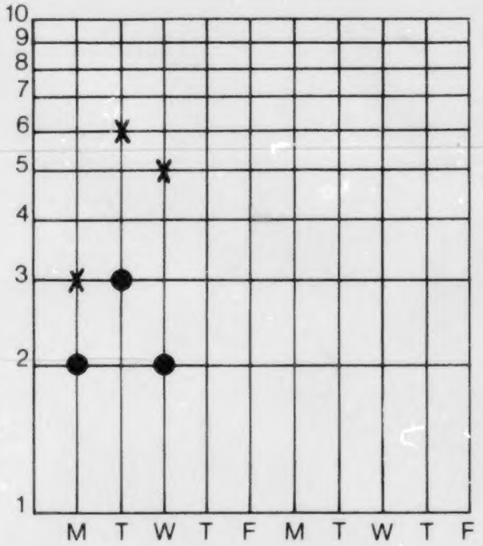
The following chart shows a program guideline drawn for correct responses from the last data plot to the desired aim of 100 percent correct responses on the third Friday of the program. Had the teacher been recording error data, she or he would have entered a program guideline for errors from the last data plot to the expected rate of performance at the expected completion date.



On the following chart enter a correct aim star on the second Tuesday at a rate of 10. Enter an error aim star on the second Monday at a rate of 1. Draw program guidelines for both correct and error responses from the highest correct data point and the lowest error data point.

Good luck!

Your turn. Go for the gusto!



Did you:

- Use the A symbol to enter the correct aim rate and date?
- Use the ∀ symbol to enter the error aim rate and date?
- Notice that the correct aim line started from the data point on the first Tuesday and ended on the second Tuesday?
- Notice that the error aim line started from the first Monday and ended on the second Monday?

RULE FOUR: For accelerating or correct targets, make a program change when the data fall *below* the program guideline for three consecutive days or when the aim is met.

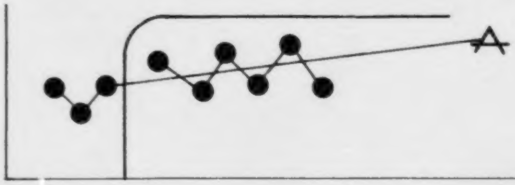
Once you have identified a measurement/monitoring system, have plotted the data, set aim stars and drawn in the program guidelines, you are ready to begin the drama of data watching. Data watching means that you carefully examine each piece of data each time it is collected—in relationship to the program guideline!

Rule four provides you with a means of making decisions about whether:

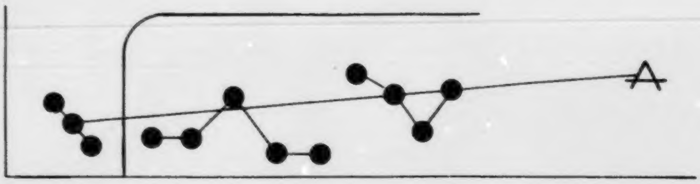
- To continue a program (Is the aim met?);
- To maintain a program (Is all going as expected? Is the data at or above the program guideline?); or
- To make a program change (Is the data following, consistently, below the program guideline?).

It is important to make a program change when the data fall *below* the guideline on three consecutive days because, statistically, it is *unlikely* that the student will be able to meet the desired goal (rate and date) without some sort of additional help or change in program. This decision rule is based on the statistical pattern that it is nearly impossible to obtain a score at or above the guideline once performance has fallen below it three days in a row.

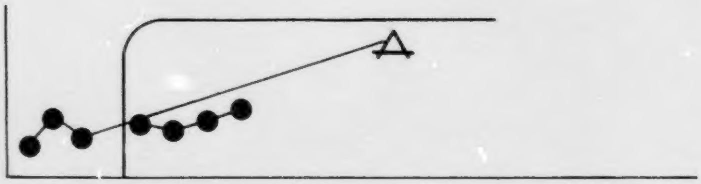
Identify the charts on which a program change is indicated using the 3-day decision rule.



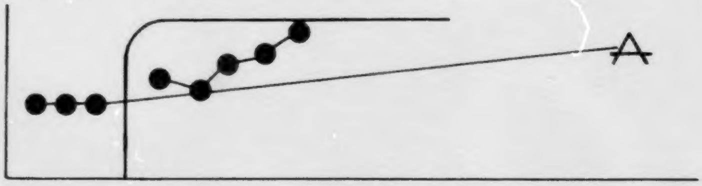
A



B



C



D

ANSWERS: (A) No change. (B) No change. (C) Change: data three consecutive days below guideline. (D) Change: aim met early. Time for a new program!

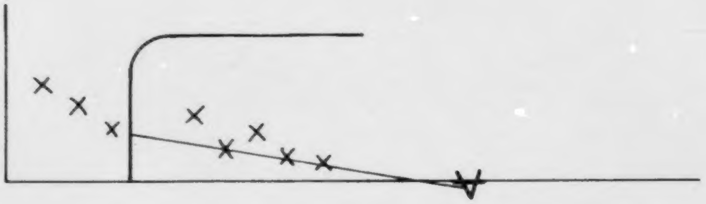
RULE FIVE: For decelerating or error targets, make a program change when the data fall *above* the program guideline for three consecutive days or when an aim is met.

Just as it is important to make changes which affect the correct performance of students, it is equally important to make changes which impact directly on error performance. Rule five provides you a base from which you can make a decision about when to intervene—when to make a program change—when you are monitoring error performance.

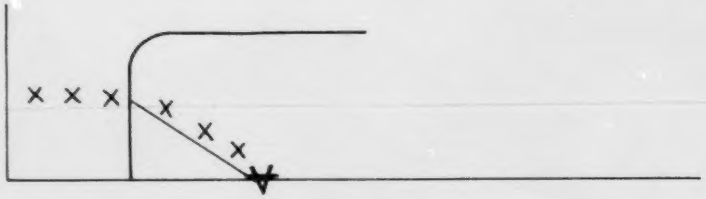
Like guidelines for correct performance, the error performance rule can help you decide if you should:

- Make a program change which will affect error performance:
- Maintain the existing program; or
- Discontinue the error/drill portion of the program if the error aim has been met.

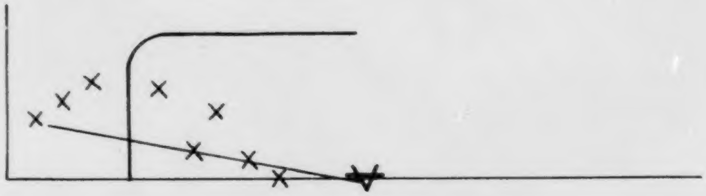
Study each figure and decide, using the 3-day error rule, which programs are in need of some sort of program change which would impact upon error performance.



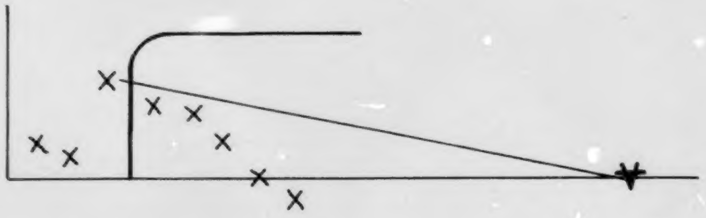
A



B



C



D

ANSWERS: (A) No change. (B) Change: 3-day decision rule. (C) No change. (D) Change: Error aim met.

SECTION TWO

PROGRAM CHANGES: HOW

GREETINGS

In Part Two, Section One, decision rules for *when* a program change was indicated by data were discussed. It is the purpose of this section—Part Two, Section Two—to discuss, once you know you need to make a change, *what kind* of change to make. In short, *how* to make an appropriate program change which will affect student performance.

Consider the following.

Joe Tennis was performing well on ''naming the states'' until last Wednesday. Since that time he has not been able to add one new state to his daily list. *Why?*

Mary Q. of Scotts, who once performed like a queen, stopped performing when she hit 30 correct responses. Now her error rate is going up. *Why?*

Hiram Walker was doing fine counting bottle tops, but once he got past 30, his errors started increasing at alarming rates. *Why?*

When Betty Crooker started failing the home economics course, we gave her all kinds of extra time in the kitchen to make things right. But she still burns the cakes. *Why?*

Indeed, *why?*

Whenever a student is not performing up to par, it is up to the instructor or instructors to determine *why* and then, *to do something about it.*

Implementing a program intervention (program change program) means that as a teacher, physical therapist, speech and language specialist or as a principal, you do something which you hope will change a specified behavior. Sometimes that means you want a student to slow down and correct his errors. Sometimes it means wanting a student to speed-up and gain some proficiency. And sometimes it simply means wanting a student to do "something" on a more consistent basis.

While it is not always easy to know what to change to affect the performance in the manner you desire, there are some guidelines which may help you.

Basically, when a student fails to perform as you wish, it is either because:

1. The student does not have the right information, or enough of the right information to do better; or
2. The student is not motivated to do better (There appears to be no consequence for doing well or poorly).

In education, these two dilemmas are classified as (1) instructional problems and (2) motivational problems. Consequently, when changes are made which deal with instructional problems, they are termed instructional interventions. Interventions initiated to impact upon motivational problems are called motivational interventions.

Perhaps the single most pertinent piece of information to be learned by those making program changes is when to make a motivational change and when to make an instructional change. Knowing when each is likely to be "maximally effective" can save many instructional days, many hours of frustration and many unnecessary, ineffective program changes.

INSTRUCTIONAL PROBLEMS

Instructional problems occur when a student does not have enough information, or enough of the right information, to keep increasing his or her performance. The problem exists because

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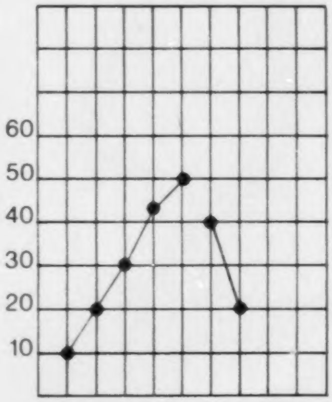
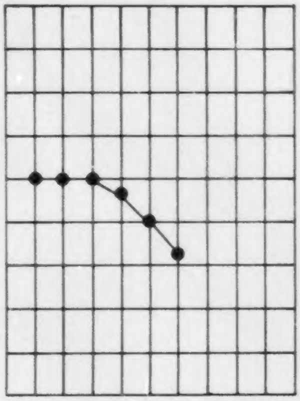
Joe Tennis *does not know* the names of more than 15 states or because Mary *doesn't know* more than 30 correct responses or because Hiram can't even *count* beyond 30. But how does one know that? How do you know that the problem is lack of information as opposed to lack of motivation?

In short, *their data tell you!* By carefully examining the students' data over time, you can determine their maximum response rate. If the students have never demonstrated a rate greater than 30 for example, you can't assume they're just ''sluffing-off.'' Everything they've done only tells you that they were sluffing-off if their scores suddenly fell below a previously demonstrated rate.

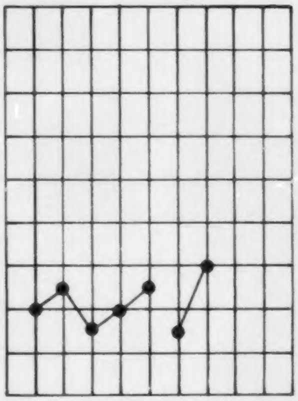
Study the three charts below. Which students *have demonstrated* that they can do at least 45 problems correctly in the allotted time?



Lee



Harriet



Rita J.

By studying the charts on the preceding page, you should be able to tell that both Lee and Harriet, at one time or another, did complete at least 45 problems. Rita J. on the other hand, never performed much above 30. For these data you can assume two things:

1. Harriet and Lee can perform at least 45 correct problems/items/units within the given time frame; and
2. Rita J. can perform at least 30 correct problems/items/units.

You *cannot assume* that, given the proper motivation, Rita J. would also do 45 problems, though indeed, she might. According to the data available, there is nothing which could accurately lead you to that conclusion.

INSTRUCTIONAL CHANGES

Need for instructional changes are most obvious when a student shows a *steady rate of improved performance,* but is not at the desired aim at the established time. From such consistent, steady data it is easy to assume that a student is not progressing because he or she does not have enough correct information to do much better. Or, has not practiced the skill sufficiently to demonstrate a fluent or proficient response.

When students lack progress due to lack of information or practice, the best thing an instructor can do for them is to provide them with more information. And the best manner in which to provide more information is to provide more or more specific instruction.

On the following page is a list of a dozen examples of instructional changes. Most of these changes lend themselves to increasing a students information "bank."

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A DOZEN EXAMPLES OF INSTRUCTIONAL CHANGES

1. Provide more 1:1 or small group instruction.
2. Increase the kind or amount of corrective feedback you are giving.
3. Drill to specific errors only.
4. Increase the amount of specific drill time.
5. Change drill materials to the most simple, straight-forward practice sheets which have the student practice the exact response you want.
6. Have the student work, drill, or practice with a peer who has already demonstrated accuracy and/or proficiency of the skill being taught and learned.
7. Slice back the amount of material so that the student is working on fewer, more specific items, each session.
8. Drop back to the next lowest sequence step.
9. Have the student preview (read silently) the material before you begin your 1:1 instruction in reading.
10. Have the student correct his or her errors three times (or five times) each before the beginning of the next activity.
11. Have the student practice/drill on the basic response demanded by the skill (i.e., write numbers).
12. Have the student self-correct his or her work and self-correct (with teacher supervision) his or her own errors.

AND A FEW DON'TS . . .

1. Don't change the material to "game-like activities"—the responses expected of the student vary too much and it is unlikely that the student will spend the needed time actually practicing those responses which need to be learned.
2. Don't set up the drill session so that the student practices that information which she or he already knows—focus on error or unknown information.
3. Don't hold back corrective or reinforcing feedback. During acquisition of new material, students need all the attention you can give them.

MOTIVATIONAL CHANGES

When students demonstrate the information to be learned but choose not to demonstrate such information consistently, it is likely that the student understands no reason for performing the task. When this happens, educators need to motivate—give reason—to their students.

Perhaps the easiest way to motivate students is to make clear the *consequences* for doing something or for doing something better. Many times, students would work harder if you just said that it would "make your day." Or please the principal. Sometimes consequences are so subtle that even educators forget what they are. No wonder students forget!

When you make a change which encourages a student to continue improving, you are making a change to motivate the student. And this is called a motivational intervention.

Most of us need motivational interventions every once in awhile. If there is no consequence—or we do not understand the consequence for writing multiplication facts at 60 correct responses per minute—it is probable that we will continue to answer facts at a lower rate. But if there is some reason for doing them faster (i.e., it enables us to balance our checkbook faster), it is likely that we will strive for continued improvement until we reach an established goal.

Like adults, children need to understand meaningful factors which indicate *why* doing something is important. Sometimes they will be motivated by simple suggestions to do better—that better performance means a better student. Therefore, the only thing educators must do is be sure that the performance they do ask for does lead to some meaningful consequence for the student. In short, if you can't think of *why* a student should learn to sort red nails from blue nails, then you may want to think about teaching it!

Motivation is closely linked to appropriate reinforcement. The recap on the following page from the works by Thomas Fairchild of the University of Idaho provides a needed reminder for many of us.

EVERYONE NEEDS REINFORCEMENT!

All of us require reinforcement. Some of us are intrinsically motivated. This means that our reinforcement is the satisfaction gained from successful achievement. Others are extrinsically motivated. Their motivation to achieve is contingent upon reinforcement outside of themselves. Some require social reinforcement. This can take a variety of forms such as praise, encouragement, recognition, and approval. Others achieve more effectively if activity reinforcers are available. Activity reinforcers are games, free time, interest centers, and privileges, such as TV, playing outside, having friends spend the night, etc. For others tangible reinforcers, such as food and inexpensive toys, are necessary.

The important thing to recognize is that everyone requires reinforcement. Reinforcement is good, but a misuse of it is wrong and should be avoided. For example, if a child will achieve well with social reinforcement, it would be wrong to give him tangible rewards for the same behavior. By the same token, if a child does not function effectively with social or activity reinforcers, tangible reinforcers should be considered.

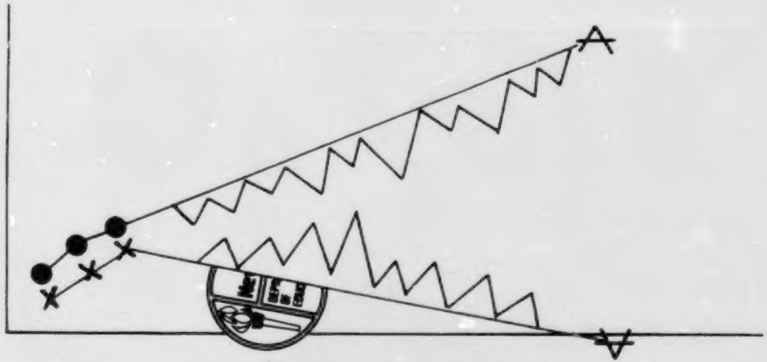
An excerp from the works of Thomas Fairchild (editor): *Behavior Management in the Classroom*, 1977.

A DOZEN EXAMPLES OF MOTIVATIONAL CHANGE

1. Decrease the amount of practice time by 1 minute for each additional correct response or decrease of one or more error responses.
2. Give points or verbal praise of "beating yesterday's score."
3. Give "free time" for daily, improved performance.
4. Have the student beat "the teacher's best rate."
5. Give days off (from the skill) if the skill is mastered "early" (before the anticipated date).
6. Hand out "happy cards" or award citations for aims which are met.
7. Keep a student chart of the skills mastered; consecrate the mastery of every 5th skill by something special the student chooses to do (but set the parameters! i.e., help the principal or the folks in the kitchen).
8. Omit practice time altogether if a student demonstrates a better rate of performance today than yesterday (they're probably practicing their heads off at home).
9. Have the student select where he or she would like to practice and continue to let him or her select the location as long as performance improves.
10. Have one student "race" against another student who is also trying to improve on the same or a similar skill. Whoever *improves the most* collects a point.
11. Let the student select the person who will monitor the daily check.
12. Let the student select the "best time of day" to complete work on an especially difficult task.

Will You Be Eaten Alive by the Shark Living in Lake Tahoe?

Draw shark teeth on the underside of the program guideline for correct responses and on the upper side of the guideline for error responses. Explain to students that to keep from being "eaten alive" they should keep their correct scores above the correct guideline and below the error guideline.

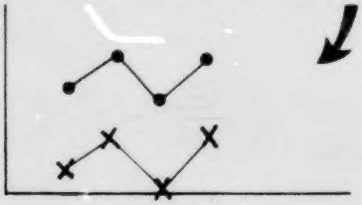


State-certified dental work

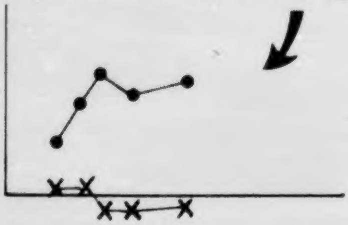
A DATA PATTERN REVIEW LESSON

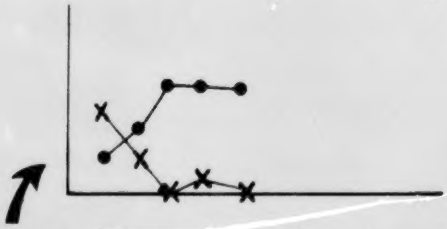
Look carefully at the data before you.

If You See high corrects and high errors on the same days and lower errors with lower correct rates, you know the student can do the task accurately when working slowly, but makes errors when hurrying. Try an *Instructional Change.* Increase student accuracy by working for the mastery of the error items. At the same time, give the student some experience with higher rates by having him or her practice correct items.



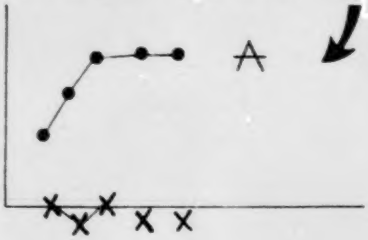
If You See high corrects and low errors on the same day, you know the student can do the task, but sometimes chooses not to. Try a *Motivational Change.*

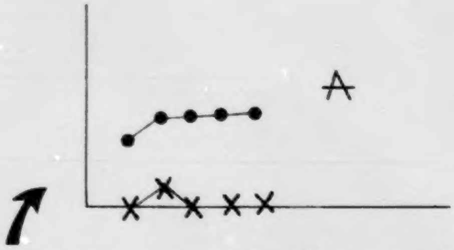




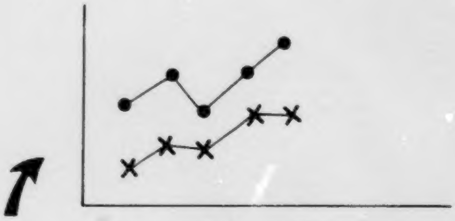
If You See plateauing corrects and gradual deceleration of errors, maybe the student is concentrating on correcting previous errors. Continue to help the student decrease his or her error by adding specific practice on errors—an *Instructional Change.*

If You See gradually increasing correct responses ending in a plateau, look at the last high rate. If it is near the desired aim, the student may be bored with the task. This is especially true if errors are at zero. Try a *Motivational Change.*



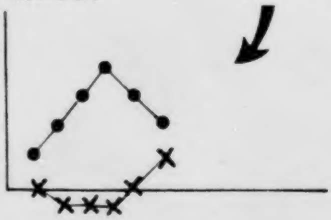


If You See gradually increasing correct responses at a low rate of performance (not near the desired aim), check to see if the student knows any more of the correct answers you desire, or understands that she or he should be working faster. Try an *Instruction Change.*



If You See error plateauing at a high rate (above 3), you know that the learner does not know the correct answer to specific items. Try an *Instructional Change.* Identify the errors and teach directly to each error item.

If You See declining correct responses and increasing error responses, student performance is definitely getting worse. Where once there was good performance, there is now the battle between student and subject. Try a *Motivational Change. And check yourself. Have you followed through on contingencies once established?*



CHARACTERISTICS OF STUDENTS WHO NEED AN INSTRUCTIONAL CHANGE

- Slowly increasing correct rate.
- Slowly decreasing error rate with a correct rate remaining somewhat constant.
- Leveling-off of correct and/or error performance at significantly less than criteria.
- Steady increase in correct rate followed by a plateau effect or slight increase in error performance.
- Little bounce or fluctuation in the data.
- Increased correct responses but maintenance of the same error rate at a score other than one or zero.

A MOTIVATIONAL CHANGE

- Correct and/or error data showing a lot of "bounce" or fluctuation.
- Random increase in error performance.
- Relatively high rate of fluency (proficiency) followed by a plateau at a rate near the criteria.
- Errors at or near zero.

A LAST WORD ON WHAT TO CHANGE

No one can tell you if *what you want to try* as an instructional or motivation change will be absolutely effective. The *only way* to know if a particular intervention will be effective is to *try it* and to watch the data after the change begins. Because every student is an individual, and will react individually to specific changes, the effectiveness of a strategy is always student dependent.

If the changes you make for an individual student or for a group of students leads to improved performance, then you can determine that the change you tried was effective.

Many times, however, the changes you decide to make will not lead to improved performance. Do not be discouraged. Good teaching does not mean "being a pro" at selecting the "just right" intervention the first time around. Being a good teacher means trying to find the best intervention, and if it doesn't work, trying again.

Please, please remember. It is better to have tried and failed (and tried again) than never to have tried at all.

ENDURE

499

PART THREE/ SYSTEMS FOR S/PH LEARNERS

This section briefly describes alternative measurement systems which have been found to be particularly effective with severely or severely/profoundly handicapped children and youth.

Monitoring systems for severely handicapped learners vary, somewhat, because the responses expected of such students vary from the usual classroom and social behaviors of less severely handicapped children. Too, the behaviors targeted for such learners are usually much finer slices of a sequence step and, as such require a greater sensitivity of the data system.

Monitoring systems suggested forthwith are designed to help teachers, parents, speech/language disorder specialists and other members of an interdisciplinary team to obtain the best pictures of performance change. The systems are designed, likewise, to be transferrable from one person to the next or to be used by more than one professional, paraprofessional or parent at one time.

There is no reason why the systems proposed in this section cannot be used with less handicapped learners. Nor is there a reason why the systems discussed in sections one and two of this module cannot be used with severely handicapped students. The distinction is made solely based on the sensitivity of the data systems discussed. Less handicapped students may simply not require the level of sensitivity of the data systems proposed in this section.

Many of the instructional programs prepared for severely handicapped or severely/profoundly handicapped children or youth are composed of very fine breakdowns of specific skills (task analysis). It is most appropriate to monitor progress on each component of a skill for such students. For example, instead of monitoring "shoe tying," it is more appropriate to monitor, for example:

- Grasp shoe lace;
- Bow lace;
- Cross laces;
- Tuck lace;
- Pull lace tight, etc.

Mastery of each of these steps will give you specific information on which portions of a task a student is having difficulty with as well as which steps have been mastered.

By monitoring the entire process of shoe tying as opposed to the component parts, you may have data over a period of time (two months) which simply list the skill as not mastered, when in fact, progress is made on a day-to-day basis.

The chart on the next page is designed to provide a format which will allow you to list the critical components of skills you are teaching now or will teach to severely handicapped students in the future.

Information on task analysis (skill analysis) is provided in the Classroom Instructional Strategies module of the *NTRK*.

501

skill ____________________

component steps

instructional order:

☐ Forward chain (first skill to last)

☐ Reverse chain (last skill to first)

☐ Jump-in-the-middle (middle skill outward)

Having identified the skill components of what might be called "the master skill" you are now ready to decide *how* you want to monitor each skill-component step.

Perhaps the simplest way to monitor a skill is simply to check, on a day-to-day basis or on an every-other-day basis, whether the student can perform the step. This is a fairly easy procedure and requires only that having identified the skill steps, you enter them on a chart followed by boxes, spaces, etc. where you can enter "completed" or "not completed" notations. Or perhaps, "mastered" or "not mastered."

The sheet on the following page provides a format for such a data keeping procedure.

JUST A REMINDER

Just as it is important to set specific criteria for a "total skill" it is equally important to set specific criteria for each component skill. Such an established criteria will let you know when one skill part is mastered or which ones are not. This information will enable you to focus instruction on the areas of greatest need.

Student ____

Skill ____

steps	day/date														

criteria ____

scoring code: ___________________________________

notes:

TRIAL DATA

Equally as common as the skill component checking system is the process of monitoring trials on specific skills or skill components.

Consider this situation. Mr. Bud Wiser wants his student, Hiram, to put on his shirt. Every day he works with Hiram demonstrating, assisting and reinforcing Hiram's attempts to "put on his shirt." After each instructional period, Mr. Wiser gives Hiram the shirt and says, "Put on the shirt." Each day, Hiram gets five opportunities to respond to the command and each time he completes putting on the shirt correctly, Bud Wiser marks the tally sheet with a check. Since Bud's goal is to have Hiram put the shirt on correctly—independently—he only marks successful, unassisted attempts as correct. Others he marks with an "X."

In keeping and taking trial data, it is not important that each trial follow one immediately after another. Following instruction, it may be most appropriate to space the trials throughout the day (i.e., one immediately after instruction, one before lunch, one after lunch, one at afternoon break, etc.).

Like other data types, it is important that you set criteria for trial data. Most educators set trial data stated similarly to: "Student will correctly put on shirt on *five consecutive trials.*"

If you wish to chart/graph trial data all you must do is convert the correct score (number of trials completed correctly) to a percent score (4/5 = 80 percent) and enter it on a percent chart (see Part Two of this module).

The following page displays a model for recording trial data.

Student ______________________________

Skill No. 1 ______________________________
No. 2 ______________________________
No. 3 ______________________________

date/day	No. 1 trials					No. 2 trials					No. 3 trials				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5

Student ______________________________

Task/Behavior ______________________________

Cues (verbal/other) ______________________________

____

date	reinforcer used	time/ criteria	phase/step	percent correct	trials									
					1	2	3	4	5	6	7	8	9	10

RECORDING LEVEL OF ASSISTANCE

Every once in awhile it is not only appropriate to mark a skill or a skill component as "correct," "mastered" or "completed" but to indicate the levels of assistance as well.

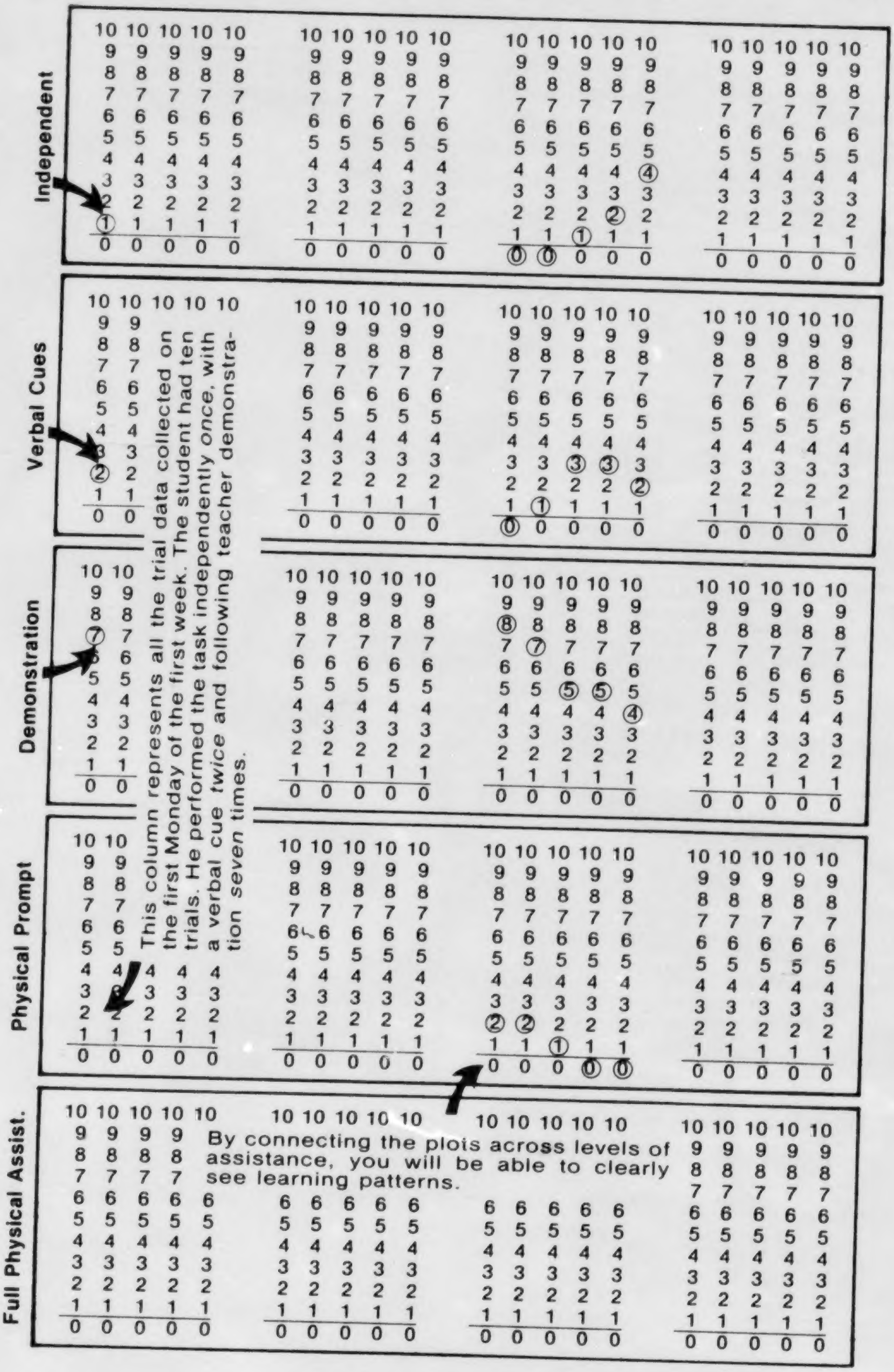
Those working with severely handicapped or severely/profoundly handicapped are aware that when asking a student to do a task we may get a response which is:

- Independent;
- Cued by a teacher verbal;
- Directly preceded by teacher demonstration;
- Aided by a teacher's physical prompt; or
- Completed with full physical assist by the teacher.

These variations for arriving at a student response are most commonly termed "levels of assistance." Many times it is necessary, for the purposes of obtaining sensitive pictures of student growth, to monitor and record the level of teacher assistance with which a student completes a task. The final criteria should always be that the student can and does perform the desired skill independently.

By combining level of assistance information with trial data, you can get an accurate picture of student performance which is sensitive to the smallest changes in behavior.

THE CHART DISPLAYS FOUR WEEKS OF DATA/CONSECUTIVE SCHOOL DAYS



This column represents all the trial data collected on the first Monday of the first week. The student had ten trials. He performed the task independently *once*, with a verbal cue *twice* and following teacher demonstration *seven* times.

By connecting the plots across levels of assistance, you will be able to clearly see learning patterns.

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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Student ______ Aim ______

Skill ______ Start Date ______

Additional Readings

Becker, W. C., Englemann, S., and Thomas, D. R. *Teaching 1: Classroom Management*. Science Research Associates, 1975.

Deno, S. and Mirkin, P. *Data-Based Program Modification: A Manual*. Leadership Training Institute/Special Education, University of Minnesota, 1977.

Geller, D., LeSure, J., and Smith, S. *Pinpointing, Counting and Charting*. Institute of Governmental Services, University of Massachusetts, 1976.

Lovitt, Thomas C. *In Spite of My Resistance I've Learned From Children*.

Shoemaker, S. and McGuigan, C. *What's Going On Here? A Collection of Exceptional Practices in Idaho*. State Department of Education, Special Education Department, Boise, Idaho, 1977.

White, O. and Haring, N. G. *Exceptional Teaching*. Charles Merrill Publishing Co., 1976.

WORKING RELATIONSHIPS

Module Nine of the *Nevada Teachers' Resource Kit* is a product
of the Nevada Department of Education,
Exceptional Pupil Education, 1978

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MODULE NINE: *Working relationships*

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PURPOSE

> We must listen before we talk, to the voice of another, and even move to the voice of the heart; we must seek to understand one another and as far as possible, respect each other. Dialogue is possible only in the climate of friendship—better still—in an atmosphere of service.

As teachers, you develop curriculum and teaching strategies for the students you serve. In the course of your professional activities you spend hours assessing individual competencies, designing programs and implementing monitoring systems and appropriate interventions. In the end, however, your goal isn't met within the confines of your room: it's met when your students succeed in generalizing what you have taught them to the environments outside the classroom and in which they live daily. For this reason alone, it is imperative that you establish strong and meaningful relationships with the persons in the child's "other" environments. The most significant of these are the parents of the children you serve and their families.

This last module in the *Nevada Teachers' Resource Kit* has been written to call your attention to important aspects of establishing and maintaining meaningful communication and relationships with parents and other persons who closely touch the lives of your students. We hope it will greatly enrich your own professional experiences and those of the people with whom you will work.

ORGANIZATION

"Working Relationships," like other modules in the *NTRK* series, is divided into sections. Section One of the monograph is devoted to careful outlining of elements which are involved in establishing meaningful rapport with parents and in conducting fruitful parent conferences. In a subtle manner, it calls your attention to the possible need for coordinated home/school programming efforts. Many of the suggestions offered in this section are directed specifically to the interaction of teacher and parent. However, with little alteration, the elements can be applied—and indeed, should be applied—to your interactions with colleagues and others with whom you come in contact.

Section Two provides a more specific delineation of skills involved in truly effective communication. In this section you will find information regarding the use of binding and freeing statements, behavior descriptions, paraphrasing, etc. It is hoped that the more specific delineation of these communication skills will enhance your interactions with parents, with colleagues and with students.

PART ONE

KERR-MARTIN LAW

1. In dealing with their *own* problems, faculty members are the most extreme conservatives.
2. In dealing with *other* people's problems, they are the most extreme liberals.

Part one is devoted to an in-depth discussion of elements involved in effectively conducting parent/teacher interviews and/or conferences. The outline on page 11 will provide you a more specific detail of the content.

Let it suffice here to say that the reason teachers and parents *need* to engage in meaningful and productive communication is to help students obtain skills in more than one setting. If this assumption cannot be realized from the beginning and become a reality for both parties, there is little purpose in spending a great deal of time establishing and maintaining a working relationship. However, if and when it is realized, many doors of growth are opened not only for the student served, but for the parents and for you as an educator as well.

As you read through this section, recall your obligation as an educator to offer sufficient opportunities for parents to communicate their needs and wishes, and to communicate them in a supportive and caring environment.

PARENTS AND EDUCATION

Knowing what we do about the interaction patterns of children, it appears likely that the involvement of family members in program decisions might be a positive endeavor. Family involvement can lead to family encouragement and support and ultimately to the better acquisition and maintenance of skills taught in the classroom. Parents can assist in the generalization of skills from the classroom to home and from home to other environments in which the learner finds himself or herself. And lest we forget, there is always the potential for generalization of home skills to the school setting! It is important, therefore, that school and home "curriculum" be coordinated as much as possible. Teachers can assist the family in the development and the implementation of behavioral programs to teach and maintain specific skills or to decrease behavioral problems which interfere with quality family life. For many students, the school or classroom setting can serve as an extended environment to which the skills taught at home can be generalized.

With all these possibilities for "instruction," coordinated programs between family and school seem not only desirable but imperative. And because of the historical events of the past, it is primarily the duty of the school to initiate the first interaction with parents and family. Traditionally, this has taken the form of a parent conference.

Parent conferences afford teachers and parents an opportunity to cooperate in the planning of curriculum for individual children and youth. However, to be successful, it behooves educators to be aware of what each party brings to the conferences in terms of expectations, pressures, etc. Mismanaged conferences have been known to do substantial damage resulting not only in inadequate programming but bad feelings between home and school. The diagrams on the next two pages highlight some of the various elements which are present each time a parent and teacher meet. Study each carefully and consider the elements in terms of your own pressures and expectations.

CONFERENCING: PARENT TO TEACHER— TEACHER TO PARENT

The components of effective conferencing evolve from the needs and skills each person brings to the conference. An outline of the necessary components is:

I. Positive initial contact.
II. Communication skills.
III. Recognition and acceptance of expectations and values.
IV. Sharing of information.
V. Defining goals and objectives.
VI. Assessment of resources and methods for achieving goals and objectives.
VII. Delineation of responsibilities for achieving the goals and objectives.
VIII. Establishment of conference outcomes.
  - Open-ended working relationships.
  - Decisions to design programs at home.
  - Decisions to design meaningful school programs.

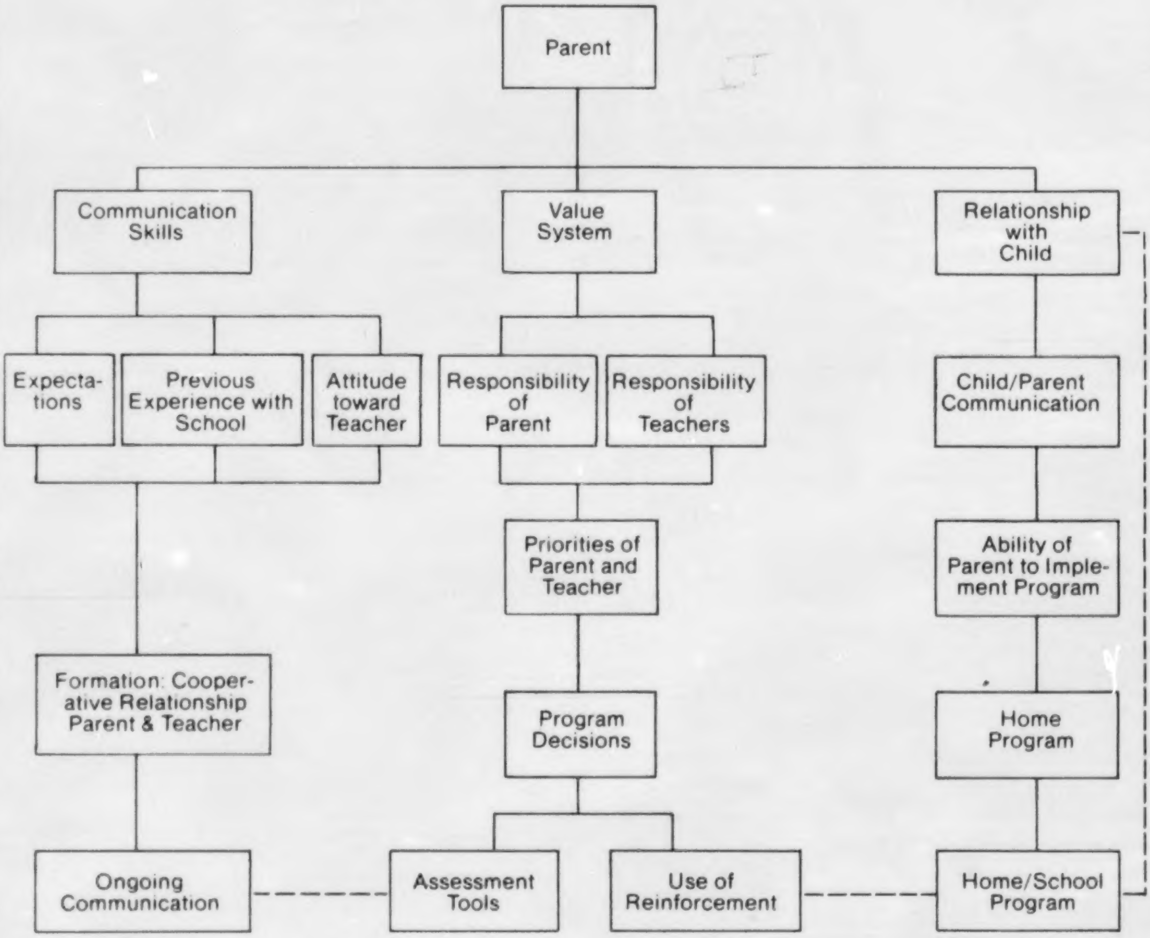
IX. Establishment of a schedule for future interactions.
  - Continued individual conferencing.
  - Parent training groups.

Each of these nine elements deserves much attention prior to and during parent conferencing. The materials on the following pages should help you identify strategies for dealing with each implementation considerations.

I. *Positive initial contact with parent(s)*

Each school district has its own method and procedures for establishing parent/teacher contact. Most frequently the school arranges particular times (usually at the beginning of the year, mid-term and near the end) at which time teachers are asked to notify parents of the upcoming conference schedule. However, despite the pressures of the principal, it is ultimately the responsibility of individual teachers who must:

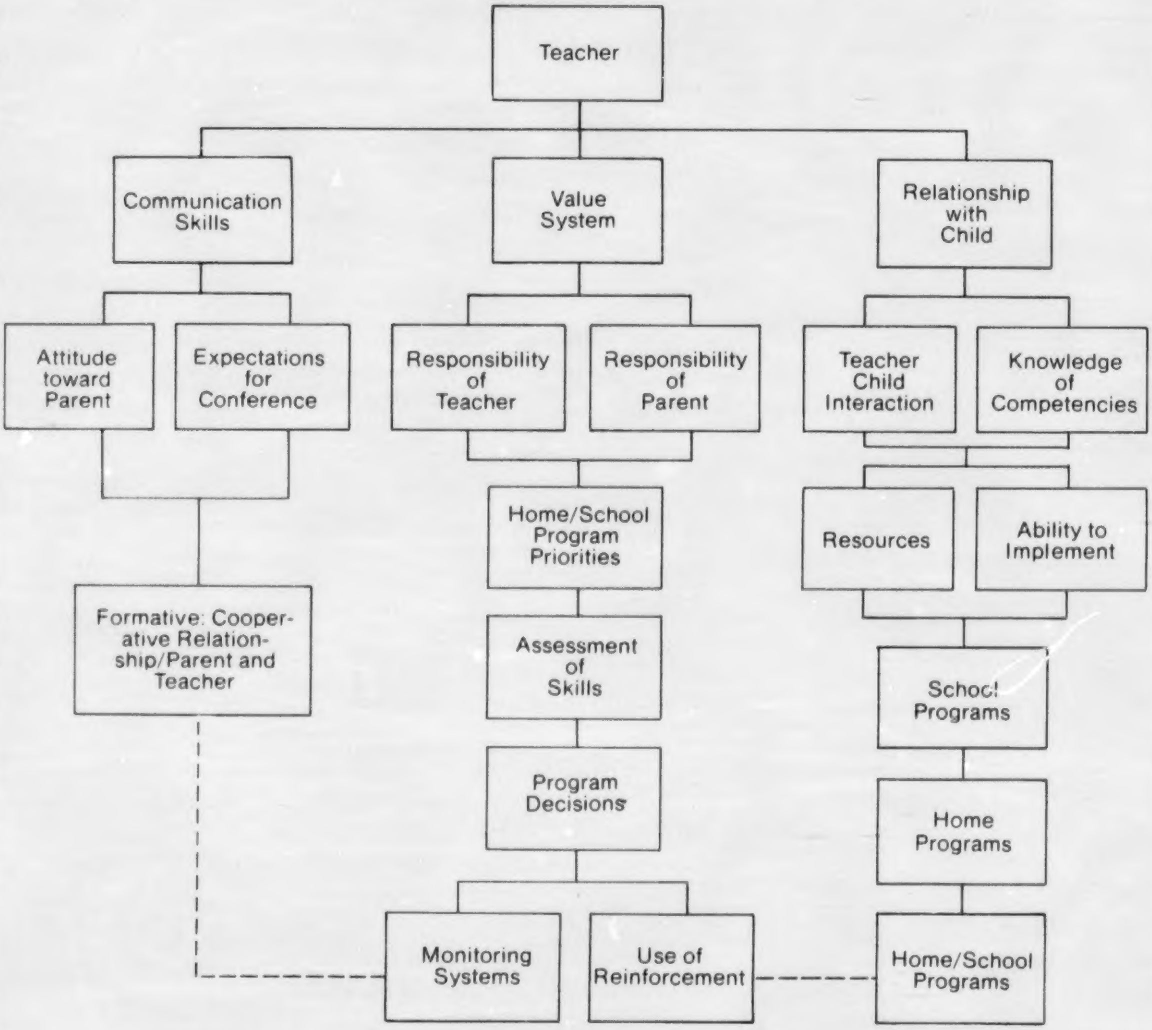
- Make the initial contact;
- Create a positive and welcoming climate; and
- Arrange mutually acceptable times to meet.


Parent
Communication Skills
Value System
Relationship with Child
Expectations
Previous Experience with School
Attitude toward Teacher
Responsibility of Parent
Responsibility of Teachers
Child/Parent Communication
Priorities of Parent and Teacher
Ability of Parent to Implement Program
Formation: Cooperative Relationship Parent & Teacher
Program Decisions
Home Program
Ongoing Communication
Assessment Tools
Use of Reinforcement
Home/School Program

The following factors will help you in this process:

A. *Call the parents.* Once you've been given the okay to contact parents (and you know the approved meeting days), notify the parents of your children *personally*. This allows you the opportunity to encourage parents to attend, and can help alleviate initial parental hesitations which can result from a form letter. Phone calls followed by a confirmation letter are often welcomed by most parents. Just be sure your ''letter'' language is neither too ''jargonized'' or too ''demeaning.''

B. *Be specific.* Describe to the parent(s) what the conference will intail (i.e., a discussion of the classroom curriculum and


Teacher
Communication Skills
Value System
Relationship with Child
Attitude toward Parent
Expectations for Conference
Responsibility of Teacher
Responsibility of Parent
Teacher Child Interaction
Knowledge of Competencies
Home/School Program Priorities
Resources
Ability to Implement
Formative: Cooperative Relationship/Parent and Teacher
Assessment of Skills
School Programs
Program Decisions
Home Programs
Monitoring Systems
Use of Reinforcement
Home/School Programs

examples of the child's school performance). Having specific information about what will be covered allows parents the opportunity *before the conference* to formulate their own thoughts on the topics targeted. It also eases any tension which might have resulted from parents who wonder what the real reason is for the conference.

C. *Take time.* Take time when you talk with a parent. Remember, much like you, it will take them a few minutes to "feel you out," to determine the "real reason" why you are calling (why, whatever happened to the old dittoed note home?). Call at a time when it is likely the parent(s) will have time to talk. While 4:30 may be an excellent time for you, it may be the middle of meal preparation for parents with children at home. Always ask, "Is this a good time to catch you?" or "Is there a better time for me to call? I just need about 5 or 10 minutes. . . ."

II. *Communication skills*

As you might have noticed on the diagrams of parent/teacher needs and skills, the area of communication affects all the other areas. If the parent and the teacher are unable to communicate their concerns for the child, the ability to use varying systems of evaluation or data collection, their dislike of programmed reinforcement, the actual events which are occurring in the home or school or a variety of other factors, the resulting conference will be a disaster. No one will benefit and all parties will leave with feelings of frustration and disillusionment. What follows in this section is a brief description of basic communication skills which allow you to encourage openness and cooperative decision making.

A. *Active listening.* Active listening includes such skills as eye contact with the parent and the ability to repeat or "paraphrase" the concerns or attitudes of the parent. Included in active listening is the ability to show, through facial expressions and body posture, an interest in the parent and his or her concerns; during the exchange, it creates a general, welcoming attitude.

B. *The use of freeing vs. binding responses.* In any interaction with another person we find ourselves making "freeing" or "binding" responses. In brief, freeing responses are objective statements and *do not assume or make implications* from what the speaker says or about the subject of the conversation. Binding responses are likely to include or express reaction or a value judgment on the part of the listener. Perhaps an example of each can best clarify this for you:

SAMPLE BINDING STATEMENT

Speaker: "My husband and I are taking separate vacations."

Listener: "Oh, how wonderful. I always like to get away on my own."

SAMPLE FREEING STATEMENT

Speaker: "My husband and I are taking separate vacations."

Listener: "Uh-huh, sometimes time away from one another can be helpful." Or merely an "uh-huh" will allow the person speaking to continue on with what she wants to tell you.

The binding reaction might require that the speaker contradict what you have said as a listener. Perhaps the separate vacation idea is not at all wonderful to the speaker, but the listener has bound her into a contradiction and does not allow the speaker an opportunity to say what she is really feeling.

The first example of the freeing statement could be perceived as somewhat binding but it also allows the speaker to freely react to the listener's words. The second example or merely a one word reaction allows the greatest freedom of response, but it is also possible that the speaker might think the listener was just disinterested. The nodding of a "yes" response should be accompanied with eye contact and an interested facial expression.

C. *Screening techniques which impair communication.* Often a listener will learn to "screen out" a certain response. Frequently teachers, and others in the listening role, begin to stop listening when they hear certain phrases (i.e., "let's form a committee") or the conversation touches upon a particular topic (i.e., playground duty). An example might be the teacher who stops listening *attentively* to the mother who begins to describe again the drinking habits of her older son or the parent who begins to criticize the school board's spending priorities. Instead of selectively screening out or "tuning out" the subject matter, the active listener can facilitate additional interaction on other topics by:

- Acknowledging the situation or subject matter;
- Admit openly that there are other topics or concerns that should be addressed first and invite the parent to shelve "the topic" and return to it later in the conference; and
- During a later interaction, offer concrete alternatives for action that the parent might pursue, such as attending the school board meetings, etc., or refer the parent to another professional who has expertise in the subject discussed.

D. *How to say "no" and allow the parent to do the same.* Few people can say "no" with very much ease. However, it is better to say "no" when you mean "no" than to have to keep your real feelings covered. Saying "yes" when you mean "no" results in a number of negative consequences for you. If you can't live with the consequences, don't make commitments (verbal or otherwise) which leave you in such a predicament.

Since parents have as much trouble saying "no" as most teachers do, it may help your interaction if you include in your opening comments a desire on your part for the parent to express what they really feel and that you will do the same.

III. *Recognition of expectations and values.*

A. *Expectations.* In every conference situation the teacher and parent have expectations for the agenda and outcomes of the interview. An essential tool in building rapport and understanding between parents and teachers is *the recognition of these expectations.* The identification of one another's expectations can be a straightforward process in which parents and teachers share and discuss their hopes for the interview. The teacher might say, "I hope by the end of this conference I will have demonstrated specific elements of our curriculum and shown you examples of Scott's work." Or "I hope that I will know more about Scott's sisters and brothers and how they might react to a program for Scott at home."

But a caution! Some parents might feel that when you establish an agenda, that they are not free to stray from that agenda. Also, some parents may feel obliged to answer your question immediately, destroying the opportunity for the parent and teacher to gradually explore and share information on a particular subject. Roger Kroth in his work, "Parent Conferences as a Training Strategy" (1977, Love Publishing Co., Denver, CO), details the need for expression and understanding of expectations.

B. *Values.* An understanding of the values of parents and their recognition of yours as a teacher can result in clearer communication and mutual respect. Parents and teachers can identify areas of priorities and responsibilities. Often through understanding of parental value systems a teacher can begin to discriminate which teaching tools or monitoring systems the parent would most readily adopt in the home. The Kroth text (see above) deals very effectively with this topic and provides value assessment tools.

IV. *The process of sharing information.*

A. *Be prepared to give information!* As a teacher prepared, you will need to have ready specific examples of materials which deal with topics to be discussed (i.e., curriculum, progress charts, etc.). If the child is already in your class, have ready his individual program materials and records. In presenting this to the parent, there will be a need (and also a desire) to emphasize the positive aspects of performance. If you've done your job as an educator, this should be no problem. (If it is, check with the sequencing or program modules in the *NTRK*.)

B. *Be prepared to receive information!* You might want to make a checklist of areas you want to cover—depending on the topic of the parent/teacher conference. Such a list might include:

- History;
- Medical concerns;
- Behavioral concerns;
- Sibling/peer relationships;
- Parental expectations for their child; or
- Parental reaction to the school program.

It is during the process of information gathering that *active listening, freeing statements* and *lack of screening of parental communication* can be successfully utilized. Use this opportunity to build a sharing, mutually-respecting relationship.

V. *Defining goals and objectives.*

A. *Teacher goals and objectives.* For teachers of exceptional students, you need to acquaint the parent with the I.E.P. and the I.I.P. for the child. By law, the parents should have been invited to participate in their initial development. If this has occurred, they will already be familiar with the documents and what they stand for. (Be sure, too, that whenever you use acronyms such as IEP or IIP, you are sure the parents understand what they stand for.) Clearly specifying long and short term goals for the learner will help the parents confirm what is being planned for their child—and offers them an additional opportunity to comment on its validity.

B. *Parental goals and objectives.* Parents should be encouraged to develop goals and objectives for home behavior. These goals and objectives will either be:

- Incorporated, if possible, into the school or classroom curriculum;
- Be identified as already existing in the curriculum; or
- Become the goals and objectives of parents as they design and initiate home/school programs with their child.

Nothing astonishes people so much as *common sense* and *plain dealings*.
—*Emerson*

* * *

As a rule of thumb, the initial interview will contain only these first sections I-V on the conference outline presented earlier. Since the purpose of the initial interview is to establish rapport, develop a relationship with the parent, exchange information and possibly define goals and objectives, that is sufficient.

However, goals and objectives might be the initial phase of a second interview, depending upon your conferencing style. It is essential that the parent realize that future conference situations are not contingent upon their participation in, for example, a home/school program. The assurance that parents understand school programs and the sharing of information and concerns in a supportive atmosphere can be an ongoing process throughout the school year.

VI. *Assessment of resources and methods for achieving goals and objectives.*

A. *Description of strategies for teaching academic and social skills.* In order to help parents clearly understand what you do, or what you would like to do, you may want to demonstrate and explain many of the teaching tools used in the classroom. You could show them what you do and then, perhaps, offer a suggestion on how the procedure could be altered to fit a home program.

B. *Description of behavioral concepts and techniques.* Often it is very worthwhile to briefly explain the use of behavioral management techiques employed in the classroom. No doubt some of your teaching strategies will incorporate behavior principles and, consequently, it will be necessary to explain them to parents for that reason alone. You may find information in other *NTRK* modules helpful in this regard, expecially Module Seven, "Behavior Management."

C. *Description of phases of learning.* In Module Six, "Basic Instructional Strategies," time was spent describing phases of learning which children progress through when they are learning skills. If you've read that module, you will recall that certain teaching strategies are more effective during various stages of learning. Just as it is important for you to understand phases of learning, it may be equally helpful to parents. For example, you may want to point out to them that when Mick Alobe is learning a new skill (acquisition) he will need lots of attention in terms of informational and corrective feedback; social reinforcement for completing the requested task should also be delivered (for best results) at a fairly frequent rate. You can explain to them that as he passes through other, more advanced phases of learning, they can systematically reduce the amount of attention they give Mick. In fact, this is not only helpful, it is critical if they ever want their child to perform the task independently.

D. *Discussion of existing resources at home.* At this point, you might want to discuss with the parent the resources present in the home. Some might include:

- Parents themselves. Parents are a continual source of reinforcement (both negative and positive) for their child. As such, they can choose to actively examine and channel their interactions with their child or continue to remain comfortable with the process and results of their present mode of interaction. Again, the parent is allowed to say "no" to changes in their interaction with their child. However, this does not detract from the overall principle that they are an essential and important resource to their child.
- Siblings. Sisters and brothers also serve as constant resources to their siblings. If a family is to become involved in home/school programming, it is often advantageous to include siblings early in the development of a program to help dispel rivalry and teasing.
- Baby-sitters and neighbors. Don't forget that children have a wealth of other contacts outside the household and the classroom. A simple cue to the neighbor or to the sitter to praise certain behaviors or ignore others can cause dramatic changes.

VII. *Determination of parent's role towards the achievement of goals and objectives.*

A. *School programs.* It is at this point in the conference that you will together determine parental involvement in home/school programming. Often, if the parents understand the school goals and objectives, they are eager to support these programs on some level. This support might range from:

- Receiving and acknowledging daily or weekly report cards;
- Providing reinforcers for mastery of various specific skills;
- Assisting in the generalization of specific skills from school to home.

An important communication skill to utilize at this stage is *paraphrasing.* Paraphrasing allows you to completely understand what the parent is choosing to do. Finally, allow the parent the opportunity to say "no" to any type of participation in school programs.

B. *Home/school programs.* The parent may choose to implement a home program centered around a behavior problem the child exhibits in the home and not necessarily at school. They may also choose to participate in a coordination of home/school programs. If the parent says "yes" to involvement either of the following two channels could be pursued:

1. *Continued individual conference situations including:*
   - Reassessment of goals and objectives;
   - Selection of specific goals and resulting objectives;
   - Teaching of basic behavior concepts and techniques;
   - How to select critical behaviors for change;
   - Data collection;
   - The development of behavior management programs which will result in desired changes within desired time-frames;
   - The selection and use of reinforcers; and
   - Fading techniques.

Reinforcement of parental involvement can be a means of modelling the behavioral technique and revealing the importance of consistent application of reinforcers. A simple method of reinforcing is the daily phone call. This would be used at the beginning of parental involvement. Possibly 3 to 5 minutes, it could serve only as a check-in process of the collection of data on the child or to reassure the parents. It can be used as a time to reinforce the parent for following the designed program and offers them an opportunity to seek clarification. If a big problem has arisen, the phone call gives you an opportunity to schedule another time to get together.

BUT REMEMBER! Systematically scheduled phone calls are not a substitute for a conference; they are merely check-in points. Use the same courtesies in calling (especially time and length) that you would like shown to you.

2. *Parent training in groups.*

The process of interaction with parents and the development of behavioral programs will follow the same format as the individual parent/teacher conference. The advantages of the parent training in groups can be as follows:

- Time effective. You will be able to explain behavioral concepts and techniques, for example, to several parents who have that interest at once. Questions generated by a group of people might also assist in the understanding of these concepts.

- Group interaction. The parents benefit from listening to a variety of behavioral programs and the processes of implementation. They benefit from this experience and can have more information to apply to future situations that they may or may not encounter with their own child.
- Group system of support. The group learning and sharing process can result in the development of a support system among the members of the training groups. They can benefit from one another's understanding of the concepts and utilize this to design future programs. Often the teacher may not be available for comment and the parent can simply call another member of the group.

There are several excellent training programs which have been developed. Some of these include *Parent Training,* W. H. Miller, and *The Art of Parenting: A Complete Instructional Kit,* B. Wagenseller, M. Barnett, J. Barnett and B. Salzberg.

PART TWO

Interacting with parents, with colleagues or with students can have its ups and downs. However, most interactive situations can be protected from failing if they're given careful consideration in how they're structured and the nature of the give and take.

In part one of this module, your attention was drawn to elements of conducting an effective parent/teacher conference. In this section, your attention is focused on elements of communication which hinder or enhance the interaction. Remembering that good communication is a result of active listening and an open and effective responding, read this section carefully and thoughtfully. Spend some time assessing your own communication skills and, if necessary, plan some structured time to build those skills which you have hitherto overlooked or forgotten to use in recent years.

SUMMARY OF BASIC COMMUNICATION SKILLS

Paraphrase: Stating in your own way what the other's remark conveys to you.

Example: "Is this . . . (statement) . . . an accurate understanding of your ideas?"; or

"Would this be an example of the point you made?" (then stating a specific example).

Behavior description: Reporting specific, observable actions of others without making accusations or generalizations about their motives, personality or character traits.

Example: "That's the third time you have said you agreed with a statement of mine and then added, 'but' and expressed agreement with the opposite view."; or

"Jim and Harry have done nearly all the talking and the rest of us have said very little."

Description of feelings: Specifying or identifying feelings by name, simile, figure of speech or action urge.

Describing your own feelings: Reporting your own inner state as explicitly as you can—making sure the statement indicates the feelings are yours.

Examples: "I feel . . . embarrassed." (naming) "I feel like a frog in a very large pond." (simile)

"I feel . . . like hugging you." (action urge)

"I just swallowed a bushel of spring sunshine." (figure of speech)

Perception check: Describing what you perceive to be the other person's inner state. It is used to check whether you do understand what the speaker feels.

Example: "You look like you felt hurt by my comment."; or

"I get the impression you'd like to change the subject."; or

"You seem to be feeling more at home now."

If you want	Use
To check to make sure you understand ideas, information and suggestions as they were intended	Paraphrasing
To check to make sure you accurately understand what the speaker feels	Perception checks
To describe what others did that affects you personally or as a group member	Behavior descriptions
To let others know as clearly and unambiguously as possible what you are feeling	Description of your own feelings

PERCEPTION CHECK

A perception check is the ability to *describe* what you perceive to be the other's inner state. People use perception checks in order to check whether or not feelings are correctly understood. When you engage in ''perception checking,'' you test to see whether you have decoded expressions of feelings accurately.

EXAMPLES OF PERCEPTION CHECKS

''I get the impression you are angry with me. Are you?'' (NOT: ''Why are you so angry with me?'' This is mind reading, not perception checking.)

''Am I right that you feel disappointed that nobody commented on your suggestion?''

"I'm not sure whether your expression means that my comment hurt your feelings, irritated you, or confused you."

Perception checks describe another's feelings. It does not express disapproval or approval. It merely conveys, "This is how I understand your feelings. Am I accurate?"

The purposes of checking perceptions are:

1. To convey that you want to understand the other as a person—and that means understanding his or her feelings; and
2. To help you avoid actions that you might later regret because they were based on false assumptions of what the other was feeling.

BINDING AND FREEING STATEMENTS

Freeing statements increase another's autonomy as a person; they increase a sense of equality.

Freeing statements and events include active attentive listening which means you attend to the listener with your body as well as your mind. They include paraphrasing, perception checks and seeking information to help you better understand the situation.

Other events to keep communication "open" or "flowing" include sharing information that has influenced your own feelings and viewpoints, directly reporting your own feelings and offering new alternatives.

Binding statements diminish another's autonomy by increasing a sense of "being under."

Conditions or events which can be interpreted as binding are:

Changing the subject without explanation (e.g., to avoid another's feelings).

Explaining the other, interpreting his or her behavior ("You do that because your mother always . . ." binds the speaker to past behavior or may be seen as an effort to get him/her to change).

Advice and persuasion (''What you should do is . . .'').

Vigorous agreement (Binds the speaker to the present position; it limits his changing his mind).

Expectations (Binds the speaker to the past. ''You never did this before. What's wrong?'' Or cues her to future action: ''I'm sure you will . . .'' or ''I know you can do it.''

Denying feelings (''You don't really mean that!'' or ''You have no reason to feel that way.'' Generalizations like ''Everybody has problems like that'' give the speaker the impression that they are wrong—and leads to closing-off communication).

Approval on personal grounds (praising the other for thinking, feeling or acting in ways that you agree with, e.g., for conforming to your standards).

Disapproval on personal grounds (blaming or censuring the other for thinking, acting and feeling in ways you do not want them to).

Commands, orders (telling the other what to do. Commands and orders include, ''Tell me what to do.'').

Emotional obligation (control through arousing feelings of shame and inferiority. ''How can you do this to me when I have done so much for you?'')

Teachers frequently engage in binding statements and, all too seldom, engage in freeing activities. It is important that if you are going to encourage and maintain quality and effective communication with your fellow professionals and parents, that you examine the binding and freeing activities that you use.

EFFECTS OF VARIOUS RESPONSES

Take a few minutes to read and think about the situations below. Which behaviors are "binding" (control or manipulate the behavior of others)?

- Listening attentively.
- Saying, "Do you really mean that?"
- Saying, "That's a good thought."
- Nodding in agreement.
- Asking, "What do you think?"
- Saying, "Everyone has problems like that."
- Paraphrasing what someone has just said.
- Asking, "Do you want to comment on this?"
- Expressing vigorous agreement.
- Saying, "I get the feeling that . . ."
- Changing the subject when someone is upset.
- "You mean you'd actually (do such and such)?"
- Looking expectantly toward the quiet member.
- Saying, "What you should do is . . ."
- Speaking at length.
- Asking, "What should I do?"
- Not participating in the discussion.

What freeing behavior do you use most?
What binding behavior?

WHAT WAS THAT YOU SAID?

TIPS FOR ACTIVE LISTENERS

- Make a commitment to listen.
- Get set physically and mentally to listen.
- Concentrate on the other person as a communicator.
- Use facilitating listening skills.
- Give a full hearing.

HELPFUL HINTS TO DIFFICULT SITUATIONS

This section briefly overviews some alternatives for dealing with what can be thought of as ''negative situations.'' Dealt with properly, each of the events below can become a growing experience for you and for the people with whom you deal:

- Breaking into an ongoing conversation.
- Resisting interruption.
- Disagreeing.
- Saying, ''No.''
- Handling criticism.
- Giving negative feedback (giving criticism).

BREAKING INTO AN ONGOING CONVERSATION

- Raise your voice slightly to signal to others you wish to speak; no need to yell.
- Use opinion statements "Well, I think that . . ."; or ask a question, "Yes, but what about . . ."
- Use hand gestures to gain group attention and conversational entry.
- Lean forward into the conversational arena.
- Touch the person to whom you wish to speak.
- Use the person's name to gain attention—e.g., "Bill, I was also thinking that . . ."

(Avoid throwing paper airplanes across the conference table.)

RESISTING INTERRUPTION

- Raise your voice slightly to signal that you would like to finish your comment.
- Repeat your opening phrase so that you don't lose your train of thought—"I think . . . but I *do* think that . . ."
- Ask the person to wait until you have finished your statement—"I think the best thing to do would . . . please wait a minute . . . would be to start a new program."
- Continue talking without hesitation—i.e., engage in parallel talking for a short while.
- Pause briefly and then quickly resume your comment—"I think that . . . the new program would be a good one."
- Don't look at the person who is interrupting you. Talk to those who are attentive.
- Hold your hand up signaling that you would like the person to stop interrupting you.

DISAGREEING

- Acknowledge the other person's point of view, or at least your perception of their position—"I see your point, but I still think . . ." or "It sounds like that is important to you but I . . ."
- Use elaborated opinion statements to express your point of view—"I take a different position." For example, "I think that . . ." or "I just can't accept your position because . . ."
- Avoid name calling—"You special educators are all pigheaded, narrow minded, rigid, dumb," etc.

SAYING "NO"

- Be as brief as possible. Give a legitimate reason for your refusal—"I really don't have the time"—and avoid long, elaborate explanations, justifications and "lies" (e.g., "I can't because by mother is arriving from out of town, and I still have a lot of errands to run, and I haven't finished my report cards yet, and my child is ill . . .").
- Actually say the word "no" when declining. The word "no" has more power and is less ambiguous than, "Well, I just don't think so . . ." or "I really can't just now . . .", etc.
- Repetition and persistence may be necessary. You may have to decline several times before the person "hears" you. It's not necessary to come up with a new explanation each time; you can use your original reason over and over again.
- Shake your head when saying "no." Often people unknowingly nod their heads and smile when they are attempting to decline or refuse. *Make sure your nonverbal gestures mirror your verbal messages.*
- Boycott the words "I'm sorry." Try to be conscious about using this phrase to excuse your refusal or otherwise weaken your credibility. Habitual use of this phrase can be distracting to your real intent.

When was the last time you should have said "no?"

HANDLING CRITICISM

- If it's fair criticism, ask for specific suggestions or alternatives from the person. What might you do to handle a situation or behavior differently.
- No need for long, self-critical, or rationalizing excuses.
- When a person's criticism is somewhat vague, unclear, e.g., "You are 'cold' with people," have them clarify, give specific examples, etc.
- Respond with opinion statements rather than "you" statements—e.g., "I think you misinterpreted what I said," instead of "Your interpretation is all wrong."
- It's okay to share your reactions, feelings, regarding the criticism—"I feel a little angry about your bringing up this issue again," or "I feel unjustly criticized."

GIVING NEGATIVE FEEDBACK

- If you are bringing up an issue that has taken place some time ago, ask permission to bring up the issue *now,* e.g., don't spring it on the person but set aside a time and place—"I'd like to discuss something that's been bothering me. Do you have some time now?" Or, "I'd like to talk about what happened last Tuesday. How about some coffee?"
- Be specific about feedback, give examples, cite situations and what the person said and/or did. It may be helpful to outline grievances *before* verbalizing them, i.e., develop a script of what you would like to say so that your anxiety won't hamper your agenda.
- Use personal pronouns, express *your* dissatisfaction, unhappiness, etc., without blaming or scolding the person—e.g., "It bothers *me* when you say . . ." instead of "*You* always say that I'm so and so." Or, "I *feel* uncomfortable when you do such and such," instead of "*You* make me so uptight when you . . ." In short, take the responsibility for your *own* feelings, don't blame the other for *making* you react in a certain way.
- Avoid name calling or otherwise "loaded words"—e.g., "You're so inconsiderate, cold, intolerable, suspicious, paranoid, crazy, special educator, close-minded," etc.
- Give negative feedback in a *serious* and thoughtful manner—try not to giggle, smile, laugh, etc.—when participating in it. These reactions tend to:
    1. Make you seem unsure of yourself and your message may be misinterpreted; and
    2. Broadcast your uneasiness or nervousness.
- Give the person some suggestions as to what he could do to alleviate your discomfort, etc. Provide some ideas to change the problematic situation. Again, some thought to these *before* speaking with the person would be helpful. Ask yourself, "How would I like things to be?" "What do I want?", e.g., "I'd like you to call before coming over, that would eliminate my dissatisfaction about your coming over unannounced."
- Again, you can express your feelings of discomfort in giving negative feedback. This may put the other person at ease, knowing that you are honestly struggling with being direct—e.g., "This is difficult for me, but I do want to talk with you about it. . . ."

DEALING WITH CRITICISM/ ANGER

If you've been teaching for very long at all (say, 3 weeks for example) you know all too well how easy it is to get angry at someone who should have done something you needed (like order desks for your classroom). Likewise, it is possible that you've also had experience with being the source of someone else's anger and, as a result, have been the target of criticism. Anger and criticism are part of the life of an educator just as they are part of the lives of most people. Understanding that to be a reality, and learning to cope with criticism and anger can benefit you a great deal. As well as the people who do deal "back" with you.

Situation: A parent walks into your class at 3:30 and, in front of another teacher, accuses you of not doing your job.

Depending on the severity of the outburst, you may well be stunned, momentarily, by the accusation. Your body will go on "red alert"—a natural, physiological response to a threat from without:

1. *Involuntarily* you catch and hold your breath; your heart pounds; the candy bar you were eating stops in the middle of your digestive system; your palms get sweaty and your mouth suddenly goes dry . . .; but as a rational human being—
2. Your reaction can be emotional—and as such, also individual.

During those first few moments following an accusation, your primary tasks are:

1. To deal with your own somatic reactions;
2. To deal with your own emotional reactions; and
3. To evaluate what the other person is saying through active listening.

Do not attempt to respond during the first barrage of words!

IN DEALING WITH THE SITUATION DO . . .

1. Relax and allow yourself to listen very carefully to what the person is saying.
2. Be courteous, and convey your interest. Use "I statements."
3. Be patient, but not condescending. Try to put yourself in the person's place.
4. Speak as slowly as necessary to keep your cool.
5. Just as you do not interrupt him/her, with polite firmness insist that you be given the chance to understand what is being said, and for you to respond in your turn.
6. Do not hesitate to admit that you have not understood something that has been said, as a means of clarifying the issue.
7. The expression of anger often comes in "waves." In the "troughs" be prepared to summarize what you think you have heard. Check with the other person each time as to the accuracy of your interpretation.
8. Engage the other person in problem solving with you.
9. Give praise for his/her caring. Remember, the person does care, or else he/she wouldn't be so upset.
10. Learn to be comfortable in saying, "I don't know." "I was wrong, mistaken." "I'm sorry" (when you really are sorry), "Please let me finish what I'm saying," and other assertive statements.

CREDITS

Information presented in this section included selected works of ElizaBeth M. Bauer, MSW, and J. L. Wallen.

Additional Readings

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Module Ten of the *Nevada Teachers' Resource Kit* is a product of
the Nevada Department of Education, Exceptional Pupil
Education, 1978-1979.

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